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THE SOUTHPORT ELEVATOR AT NEW ORLEANS.

The immense export grain trade of New Orleans which is constantly increasing, has made it necessary for the Louisville, New Orleans & Texas Railroad Company, which handles a large share of this traffic, to erect a large grain elevator at that point to accommodate the traffic. The elevator, of which we herewith give a cut, was only recently completed at Southport, just above New Orleans,

capacity of 300,000 bushels. It is built upon a pile foundation with piers of heavy masonry on the same. It has a clear story under all the bins. The bins are 50 feet high and are built of 8 and 6 inch lumber. All the framing below is of selected long leaf pine.

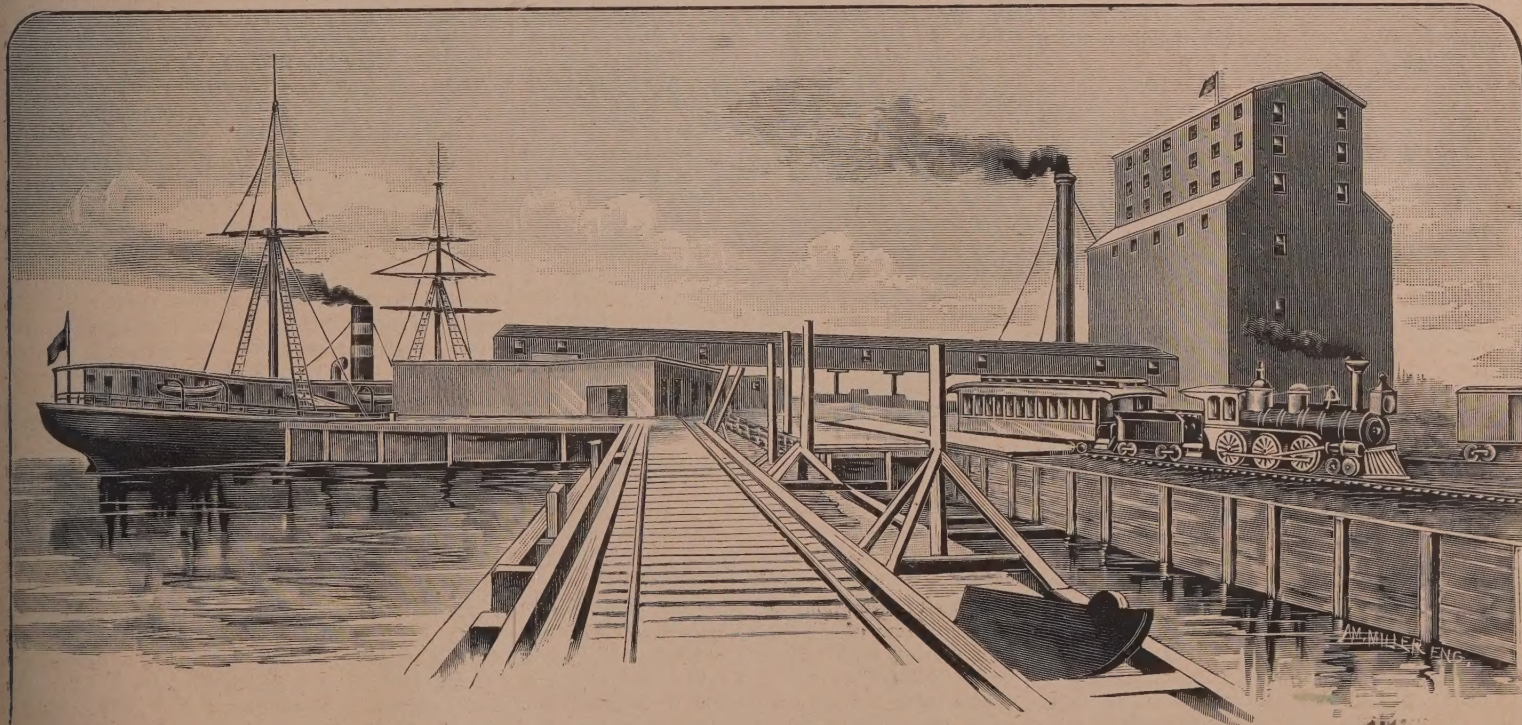
The first story is the spouting floor; on the second or scale floor are eight 1,000-bushel hopper scales, two at each leg, there being four legs in all. The grain is elevated by a 20-inch rubber belt, to which is attached 18-inch elevator buckets. The iron elevator boots are set in

It contains a 14x20 Corliss Engine and two tubular boilers 54 inches by 16 feet. The plant is supplied with steam fire pumps and all the necessary equipments to make it first class in every respect.

It was designed and erected by James Stewart & Co., elevator architects and contractors of St. Louis, Mo.

HOW THE PROFITS ARE MADE.

At a recent meeting of the stockholders of the Chicago



THE SOUTH PORT ELEVATOR AT NEW ORLEANS.

where the company had already built an extensive wharf and warehouse.

The elevator is situated well back from the wharf and provided with a belt conveyor to the river front, reaching vessels through shipping bins at three different points. This is the first large grain elevator which has been erected at New Orleans. Heretofore the grain has been handled in floating elevators. Since the elevator was completed, it has been necessary to run it day and night in order to dispose of the large shipments which have been made through it.

The building is 62x132 feet, and has 66 bins with a

a wrought iron tank.

All the elevators are driven with friction clutches, and any one may be thrown out, from the ground floor by a light cable attached to friction clutch on top floor. The spouting is complete and so arranged that the belt conveyor to the river can be reached by every leg. The belt for conveying grain to the river house is of rubber, 30 inches wide, about 700 feet long and has a carrying capacity of 10,000 bushels per hour. The lower floor is equipped with Richmond Grain Separators, having a capacity of 3,500 bushels per hour.

The boiler and engine house is of brick, and 50x32 feet.

& Northwest Granaries Company in London, a from Levi Mayer, the Chicago lawyer, was read, from which we clip the following:

"You will readily understand that it is quite impossible to get at anything like the exact profits made by the Van Dusen plants since Aug. 1. Their profit is principally made in carrying the wheat for about six months or more, and in the usual winter rise in the price of wheat, which brings about, by way of anticipation, heavy storage, consequently increased storage income. Mr. Van Dusen, both verbally and in writing, has given me every assurance that this year will be a prosperous year. I have,

however, omitted to mention one source of profit which has turned in well during past years, and which we may expect to do the same this year. That is the profit derived at our Star Elevator from the grading of wheat. It is necessary to tell you that wheat is graded according to weight, and as some grain is much over the weight required for the first grade, it is possible to mix a certain quantity of lighter, or second grade grain with it, and make all up to first grade standard. The possession of country elevators in so large an area, and the possession of so enormous an elevator as the Star, which can, and does, as you have heard, contain nearly 2,000,000 bushels of grain, enable us to earn this considerable and legitimate profit. It is, in fact, owing to our large operations that we are able to regain what it would not pay smaller operators to attempt to procure, and to add further to our balance of profits."

METHODS OF CALCULATION.

BY R. JAMES ABERNATHEY.

The better acquainted elevator men are with all the methods of calculation which enter into the construction and operation of elevators, the more intelligently can they operate them. While the mere knowledge of grain in all its relations to the business may be all that is necessary to successfully operate an elevator, still it will often be found quite convenient to be fairly well informed, as above stated, because questions frequently arise that, without a knowledge of how to answer, cannot be answered without appealing to an expert, and experts are not always available.

It is often desirable to know how much grain a house will hold, or how large to make a bin or hopper to hold a given number of bushels. Of course the holding capacity of any bin or hopper already in use may be determined by weighing it in full or weighing it out when full, but it is an inconvenient way, especially when you want to get at the matter quickly. To do it quickly one must know how to calculate it the same as the expert or mechanic does when he is making construction designs. To do that quickly we reduce the space in the clear of the bin to cubic feet by multiplying the height or depth and width in feet both ways together, and their product by the constant factor .8035, the result being the quantity in bushels the bin or hopper will hold.

For example we have a bin that is 20 feet deep down to the hopping and 8 feet wide each way. In that we have $20 \times 8 \times 8 = 1,280$ cubic feet. For the hopping we will use the old mathematical rule for finding the contents of a cone or pyramid which is multiply the area of the base by one-third the altitude. The base in this case is 8 by 8 feet, and if the hopping has an angle of 45 degrees, as it should have to make it empty freely and clear well, the altitude or depth will be 4 feet, the one-third of which is $1\frac{1}{3}$ feet, making $8 \times 8 \times 1\frac{1}{3} = 85.333$ cubic feet. The whole problem then resolves itself into this kind of a formula: $1280 + 85.333 \times .8035 = 1,097\frac{1}{2}$ bushels.

In practice it is necessary to carry out the decimal figures so far, as the result will be close enough anyway. However, the constant factor .8035 should be adhered to, as by its use less than one-fifth of a cubic inch to the bushel is lost, while by the use of the factor 8 only, a loss in the calculation of nearly eight cubic inches to the bushel is the result. We cannot so easily fix rules for determining in advance the size in any way for a bin or hopper to contain a given amount of grain. We can, of course, easily tell how much space in cubic feet a given amount will occupy, or nearly so at least. It is probably well to here explain that a hundred bushels of wheat by weight weighing 62 pounds to the bushel, will occupy less space, than a hundred bushels weighing but 56 pounds to the bushel. If the grain were measured instead of being weighed, then the space per quantity occupied would be the same for all kinds and conditions of grain.

But to get back. Knowing the number of bushels we want a contemplated bin or hopper to hold, we reduce to cubic feet by dividing the bushels by .8035, which gives the space required in cubic feet, and if circumstances permitted the bin to be the same size in every direction, it would be easy to get at its size by extracting the cube root of the sum. But as a rule bins are much deeper than wide, and often wider one way than the other, hence the application of the cube root rule would rarely be available or useful. However, for the construction of a scale hopper, the cube root rule may be applied, as the body of the hopper can just as well be the same size in

every direction, if the place it is to occupy will permit it. The body of the hopper can be calculated and the hopping added, if height room will permit; if not, the body of the hopper can be cut down to the hopper's equivalent, that is, the holding capacity of hopping can be taken off the lower end of the body of the hopper.

Having ascertained the size of the main body of the hopper necessary to hold the whole amount of grain, it is easy to get at the size of the hopper, as already explained. Reduce its space to cubic feet, then reduce the depth of the square body of the hopper accordingly, and the whole hopper will then hold approximately what was originally calculated for. In making calculations for the holding capacity of an entire house, each bin and hopper should be measured and reduced to cubic feet separately, the whole added together and multiplied by the constant number .8035. The reason for that is that but few bins in an elevator are of the same size in every direction.

The inquiring reader may want to know on what base the rules are established and especially how the constant factor .8035 is obtained. As all are aware, a cubic foot contains 1,728 cubic inches, and a standard bushel 2,150.42 cubic inches; the factor .8035 is the decimal relation which a cubic foot bears to a bushel as nearly as it can be reduced to practice, and is therefore used for convenience in making calculations, it being less trouble to multiply continuously, when it can be done, than to alternate the operation with long division.

Cribbed ear corn of good quality is usually estimated at $2\frac{1}{4}$ cubic feet per bushel; inferior grades from that number up to $2\frac{3}{4}$ cubic feet per bushel. Then there are some grades that it would scarcely be safe to take in at that. Still, such inferior corn is rarely cribbed. In calculating the quantity or number of bushels of corn in a crib, reduce the whole to cubic feet by multiplying length, width and height together and then dividing by 2.25 or multiplying by .444 as you may like, but this rule is for the best grades of corn. For the poorer grades reduce to cubic feet and divide by 2.5 or multiply by .4. When corn is abundant and cheap, the rules may do to buy and sell on, but if it were worth a dollar a bushel and I was the buyer, I would prefer having it shelled and weighed, as rats might get in considerable work in the center of the crib that could not be seen, especially if it had been cribbed very long. However, the rules do very well for a man to determine about what quantity of corn may be in crib when he wants to keep a record of stock on hand.

On the Pacific coast and in some other countries grain is bought and sold by the hundred pounds or cental, instead of the bushel, as in all sections of this country east of the Rocky Mountains. To arrive at the price per bushel on California and other cental quotations, we simply multiply the quoted price by .6 and we have the price per bushel. For instance, California wheat is quoted at \$1.40, we say $140 \times .6 = 84$ cents per bushel. It may not be necessary to explain, and yet some may have forgotten that every figure or figures with a point to the left is a decimal, and after a problem in multiplication is finished, as many figures as there are decimals in both the multiplier and multiplicand must be pointed off to the right of the column in the answer. To explain we will say $5.25 \times .5 = 2.625$. Hence in the above cental example we multiply 140 cents, the cental price, by .6, strike off the cipher, which is of no value there, and have 84 cents as the bushel price. I stop to make this explanation because I have used decimals right through in this article, and always do when I can, to avoid division, which requires more work.

The most difficult thing for Americans to understand and keep the run of are English quotations. They will see in the daily market reports wheat quoted at so many pounds, shillings and pence, but have no definite idea of what a bushel is worth expressed in United States currency. The prices quoted on grain in English markets are per quarter, instead of bushels, a quarter containing 480 pounds or 8 bushels. In English money 12 pence (d.) make a shilling (s.) and 20 shillings a pound (£). The course to pursue is to reduce the quoted price to shillings by multiplying the pounds by 20 and adding in the shillings, ignoring the pence if there are any. Then multiply the result thus obtained by 24.33 and add in double the number of pence. An English penny contains a fraction more than two United States cents, or to be exact, 2 1/72 cents, so that allowing two cents for an English penny is as near as we can get at it. When we have reduced the English quotations to shillings and multiplied the product by 24.33 and added in the pence, as instructed, we have the price of a quarter of wheat in cents, then to get at

the price per bushel we divide the product by 8, the number of bushels in a quarter.

We use the 24.33 as a multiplier, because an English shilling contains 24 1/2 cents. Of course the calculator can adopt either method. He can multiply by 24 1/2 straight, or by 24.33, as he likes. The result will be substantially the same. It is impossible to change English into United States currency without a fraction. Right here I would like to remark that it seems as though it would be quite right, and would certainly be a great convenience for English speaking countries, to adopt a common and uniform standard of currency, weights, measures, etc., doing away with pounds in money and bushels in grain. Let all measures, whether of value or quantity, be divided into ones, tens, hundreds, etc. Still I cannot see that any suggestion here on that point will be considered of special value by the powers that be nor of any special interest to the elevator men at large. I think, though, the bulk of what I have written will prove of some interest and value to a large number of the readers of this journal.

SOUTH DAKOTA'S SEED WHEAT LAW.

The legislature of South Dakota has passed a new seed wheat law which seems to cover the ground pretty fully. According to this law the county will supply seed wheat to those needing it, and the elevator men of the Northwest will thus be relieved of the necessity of loaning the farmers seed, for which they never receive recompense, and seldom get back over 10 per cent. of the amount loaned. The farmers do not even give the elevator men credit for having helped them through an adverse season.

The new law is pronounced unconstitutional by those who ought to know, but as the public sentiment demanded an act upon this all-important subject, and as this is the least objectionable of the three which have been brought forward, it will stick beyond any question. It may very properly be termed a "war measure," and as such will be permitted to work out its purpose.

Among other things the law provides that if, in the opinion of the commissioners of any county, the subsistence of any person, or his or her family, residing on farm land, depends upon the raising of a crop, it shall be lawful for the commissioners to furnish to such person seed grain of the kind and to the amount hereinafter provided, that seed grain may be furnished the needy persons as follows: Of seed wheat not exceeding seventy-five bushels; but no more of any kind than the value of which will equal the market value of seven 1/2 bushels of wheat in good condition for sowing on March 15 of the year in which the grain is furnished shall be furnished to any person; and it shall be at the option of such person to take for seed seventy-five bushels of wheat as aforesaid, or to take a less quantity of wheat and such other grain for seed as at the market value of such other grain will, together with the seed wheat taken, amount to the value of seventy-five bushels of wheat.

It empowers the commissioners to purchase the grain for their respective counties and order warrants to be drawn on the general county fund in payment, provided that they do not authorize the issuing of warrants which shall in the aggregate exceed 1 per cent. of the last annual assessed valuation of said county; that the commissioners may, for any seed grain furnished under the provisions of this act, cause to be filed in the name of the county a statement in writing in the office of the Register of Deeds of the county, showing the kind, quality, and value of the grain so furnished, the name of the person to whom furnished, and a description of the land upon which the same is to be sown or planted, which statement shall be filed and entered as is provided by law for the filing and entry of chattel mortgages; provided, that for such filing and entry the Register of Deeds shall be entitled to charge no fee or compensation. Upon the making and filing of such statement in the manner provided for seed liens by any person, copartnership association, or corporation, under the provisions of chapter 150 of the session laws of 1897 and acts amendatory thereof, the county shall thereupon have a lien upon the crop produced from such seed, the same as is allowed to persons under said chapter and acts amendatory thereof. Section 5 provides that the law shall take effect as soon as passed, and that the purchase price of the grain is to be paid back by the 15th of October following. Section 6 prescribes a penalty for the misuse of this grain.

NEW CLEANING ELEVATOR AT CHICAGO.

It has been stated, and on good authority, that the new elevator recently erected at the corner of Sixty-fourth and State streets, Chicago, of which we herewith give a cut, is the finest grain cleaning elevator in the world. It represents a new departure in the line of grain cleaning elevators. It is said to be the first grain elevator in which manilla rope is used for transmitting power, which is claimed to be especially applicable for this purpose, on account of cheapness, economy of space and power.

There are three separate rope transmissions in the plant, one in the engine room where one-inch rope in ten windings drives the main shaft from the engine, one transmission driving in five windings from first floor to the cleaning floor, and four windings from first floor driving to bin and machinery floors. The entire transmission does not occupy more than seven inches in width. Then there is a short transmission of one-inch rope in two windings on the machinery floor, driving the center transfer leg. All transmissions are noiseless and run at a speed of about 1,600 feet per minute.

In the general arrangement of the elevator the main feature is the location of the cleaning floor in a separate story between the first and bin floors, whereby the cleaners are fed from a set of garners above and discharged into receiving garners below, so no elevator legs are required to continually convey to and from the cleaners, as in most cleaning elevators.

From two Monitor Grain Cleaners and two Champion Oat Clippers the chaff and dust is carried through galvanized iron pipes by air currents to the dust collectors above the boiler. This dust constitutes a large part of the fuel used in making steam. The entire elevator is fitted with dust collectors and floor sweepers. Everything short of spikes and stones is carried by the air currents through the fan on the cleaning floor to the boiler.

The two receiving legs are so located as to unload two cars at a time by means of four steam shovels. A transfer and shipping leg located in the center of the working part of the elevator can load twenty-five cars per day, while receiving fifty cars. The car spouts are located between the loading and receiving tracks so fifty cars can be loaded on either track in a day.

The two conveyors are single, one continuous belt carrying grain on bin floor to the storage bins, and below first floor from the bins to the elevators.

Three 1,000-bushel Fairbanks Scales and three 1,000-bushel garners are located in the cupola or working part of the elevator.

The power is supplied by two 60x16 steel boilers, a 150-horse power Buckeye Engine and a Berryman Heater. The entire plant is undoubtedly one of the best arranged and most complete grain cleaning elevators in the world.

The elevator is owned by Charles Counselman & Co., and is run by Mr. E. Ashley, who has the credit of suggesting the general arrangement of the cleaning house.

The elevator was planned and erected by THE HEIDENREICH COMPANY, engineers and builders of grain elevators, at 99-101 Metropolitan Block, Chicago, Ill.

Lecturers in the farmers' alliances, claiming that speculation lowers values of farm products, are off their base. The opposite to it is the fact.—*Minneapolis Market Record*.

TO INCREASE CONSUMPTION OF CORN.

How to ameliorate the condition of the farmer is one of the great questions of the day. The corn producers are crying out against everybody and everything because the price of corn is so low. They seem to forget that they have caused it by producing in excess of the demand. If the farmers will insist on producing enough corn every year to supply the country for three years, they in connection with the grain dealers, exporters and the Government, must take active steps to increase the demand for it. The European masses are sadly in need of cheap breadstuffs and American corn fills the bill.

The Kansas City *Star* says: The Western farmers will be interested in the announcement that the American Indian corn exhibit will be a notable feature of the Edin-

better class in Europe that corn is unfit for food, and its wholesomeness is gravely disputed. It would seem that, by a proper effort, this misapprehension could be removed. The lectures and writings of scientific experts have failed to accomplish this result, and a more convincing method must be employed. If the people of the Old World knew how palatable and wholesome Indian corn is in all of the shapes in which it is prepared for human consumption, the foreign demand for that cereal would increase to a degree that would quite remove all danger of over production in this country. Corn has the merit of cheapness, it contains a very large percentage of nutriment, and being proof against the process of decay which renders other food commodities perishable, it can be transported to the uttermost parts of the earth and preserved for any length of time. All that is required to popularize it is to enforce its claims in a manner which will compel

recognition. The moment is ripe for such an undertaking, and the Edinburgh fair furnishes the opportunity.

But there must be a departure from the usual plan of display. The stomach as well as the eye must be enlisted. The proof of the pudding is in the taste. In connection with the corn exhibit at Edinburgh there should be facilities for cooking it in its various popular forms, and thus it would be presented in a new light to the European public. The mere preparation of it in such shape would constitute a strong attraction, and cause it to be talked about far and wide. With the seductive flap-jack, the toothsome pone—not to speak of mush and maize pudding—to plead for it, Indian corn would soon be able to make its way in the markets of Europe.

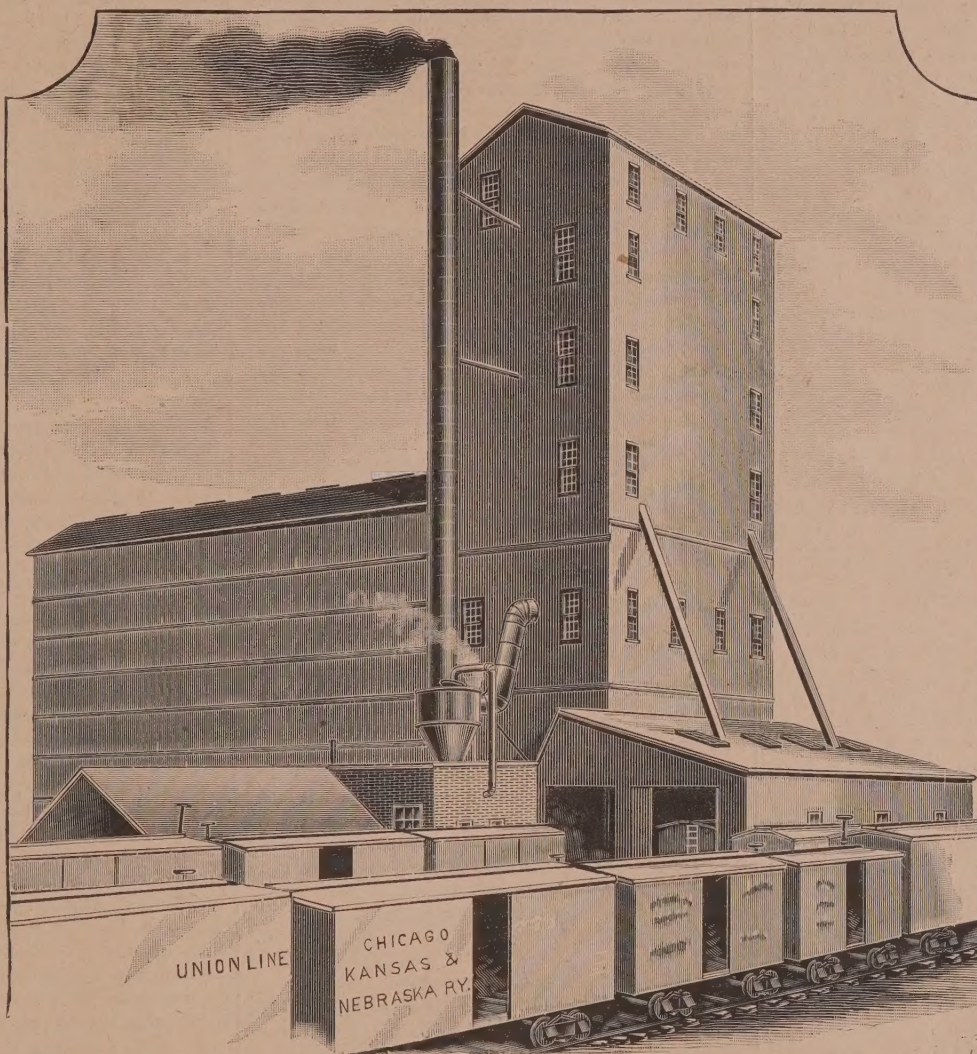
The time is coming when America will find in lands beyond the sea an outlet for its surplus of corn, and that day may be hastened by a well-directed stroke of the enterprise and ingenuity for which the people of this country are noted. If the toiling millions of the Old World can be impressed by practical demonstration with the merits of Indian corn as food, and can be taught to eat it, it will soon cease to be an article of fuel in this country, and will pay a handsome profit to the producer. The experiment on the plan suggested is worthy

of a trial, and it is believed that it would insure satisfactory and successful results.

A COMMENDABLE CHANGE.

It seems that our agitation of the grain shortage question has been influential in causing one railroad company entering Chicago to make a much-needed reform. For a long time it has been the custom with some of the Western railroads entering Chicago to allow most any one to go to the cars loaded with grain, break open the seal and take a sample of the grain. The cars were not re-sealed, but were allowed to stand open so that any one could help himself.

The Chicago, Burlington & Quincy has issued an order which went into effect recently, so that hereafter no one will be allowed to sample cars of grain on the Burlington tracks without an order from the owner of the grain, which must be presented to the agent at Morton Park yards, in order that he may send a man with the sampler to open the car and re-seal it. Sampling must be done hereafter while the cars are at Hawthorne yards or on tram track.



NEW CLEANING ELEVATOR AT CHICAGO.

burgh exposition, which opens in May. The display of American agricultural products at the Paris fair last year was quite incomplete, and the opportunity which that occasion afforded for advertising the resources of the United States was not adequately improved. Kansas and Missouri each appropriated considerable sums to secure proper representation, but it is doubtful whether the results have justified the outlay, though it is believed that the right kind of a display would have been highly advantageous.

An effort will be made to correct this mistake at the Edinburgh exposition. The chairman of the Executive Committee and the Lord Provost of Edinburgh have taken the matter in hand, and they will make a special point of enlightening the public as to the merits of Indian corn as food, of which so little is known at present in Europe.

It will be difficult for the people of this country, where corn is such a popular article of diet, to understand how limited its consumption is in the Old World. Indeed, it is stated that during the famine in Ireland, when America sent to the distressed island shiploads of supplies, nothing but the pangs of extreme hunger overcame the prejudice which existed in Ireland against corn as a source of nutrition for the human stomach. It is still held by the

LAW GOVERNING CARRIERS.

We have been requested to publish that part of the Illinois Railroad and Warehouse Law relating to the receiving, carrying and delivering of grain by railroad companies, and we herewith give that part of it:

Section 1 of that part of the law provides that every railroad corporation chartered by or organized within the laws of this state, or doing business within the limits of the same, when desired by any person wishing to ship any grain over its road, shall receive and transport such grain in bulk within a reasonable time, and load the same either upon its track, at its depot, or in any warehouse adjoining its track or side-track, without distinction, discrimination or favor between one shipper and another, and without distinction or discrimination as to the manner in which such grain is offered to it for transportation, or as to the person, warehouse or place to whom or to which it may be consigned. At the time such grain is received by it for transportation, such corporation shall carefully and correctly weigh the same, and issue to the shipper thereof a receipt or bill of lading for such grain, in which shall be stated the true and correct weight.

Such corporation shall weigh out and deliver to such shipper, his consignee or other person entitled to receive the same, at the place of delivery, the full amount of such grain without any deduction for leakage, shrinkage or other loss in the quantity of the same.

In default of such delivery, the corporation so failing to deliver the full amount of such grain shall pay to the person entitled thereto the full market value of any such grain not delivered at the time and place when and where the same should have been delivered.

If any such corporation shall, upon the receipt by it of any grain for transportation, neglect or refuse to weigh and receipt for the same, as aforesaid, the sworn statement of the shipper, or his agent having personal knowledge of the amount of grain so shipped, shall be taken as true as to the amount so shipped, and in case of the neglect or refusal of any such corporation, upon the delivery by them of any grain, to weigh the same, as aforesaid, the sworn statement of the person to whom the same was delivered, or his agent having personal knowledge of the weight thereof, shall be taken as true as to the amount delivered, and if by such statements it shall appear that such corporation has failed to deliver the amount so shown to be shipped, such corporation shall be liable for the shortage, and shall pay to the person entitled thereto the full market value of such shortage, at the time and place when and where the same should have been delivered.

Section 2 provides that at all stations or places from which the shipments of grain by the road of such corporation shall have amounted during the previous year to fifty thousand (50,000) bushels or more, such corporation shall, when required so to do by the persons who are the shippers of the major part of said fifty thousand bushels of grain, erect and keep in good condition for use and use in weighing grain to be shipped over its road, true and correct scales, of proper structure and capacity for the weighing of grain by carload in their cars after the same shall have been loaded. Such corporation shall carefully and correctly weigh each car upon which grain shall be shipped from such place or station, both before and after the same is loaded, and ascertain and receipt for the true amount of grain so shipped.

If any such corporation shall neglect or refuse to erect and keep in use such scales when required to do so as aforesaid, or shall neglect or refuse to weigh in the manner aforesaid any grain shipped in bulk from any station or place, the sworn statement of the shipper, or his agent having personal knowledge of the amount of grain shipped, shall be taken as true as to the amount so shipped. In case any railroad corporation shall neglect or refuse to comply with any of the requirements of section first, second and fifth of this act, it shall, in addition to the penalties therein provided, forfeit and pay for every such offense, and for each and every day such refusal or neglect is continued, the sum of one hundred dollars (\$100) to be recovered in an action of debt before any justice of the peace in the name of the people of the state of Illinois, such penalty or forfeiture to be paid to the county in which the suit is brought, and shall also be required to pay all costs of prosecution, including such reasonable attorney fees as may be assessed by the justice before whom the case may be tried.

Section 3 provides that every railroad corporation which shall receive any grain in bulk for transportation

to any place within the state, shall transport and deliver the same to any consignee, elevator, warehouse or place to whom or to which it may be consigned or directed: Provided such person, warehouse or place can be reached by any track owned, leased or used, or which can be used by such corporation, and every such corporation shall permit connections to be made and maintained with its track to and from any and all public warehouses where grain is or may be stored. Any such corporation neglecting or refusing to comply with the requirements of this section, shall be liable to all persons injured thereby for all damages which they may sustain on that account, whether such damages result from any depreciation in the value of such property by such neglect or refusal to deliver such grain as directed, or in loss to the proprietor or manager of any public warehouse to which it is directed to be delivered and cost of suit, including such reasonable attorney's fees as shall be taxed by the court, and in case of any second or later refusal of such railroad corporation to comply with the requirements of this section, such corporation shall be by the court, in the action on which such failure or refusal shall be found, adjudged to pay, for the use of the people of this state, a sum of not less than \$1,000 nor more than \$5,000 for each and every such failure or refusal, and this may be a part of the judgment of the court in any second or later proceeding against such corporation. In case any railroad corporation shall be found guilty of having violated, failed or omitted to observe and comply with the requirements of this section, or any part thereof, three or more times, it shall be lawful for any person interested to apply to a court of chancery and obtain the appointment of a receiver to take charge of and manage such railroad corporation until all damages, penalties, costs and expenses adjusted against such corporation for any and every violation shall, together with interest, be fully satisfied.

Section 4 provides that all consignments of grain to any elevator or public warehouse shall be held to be temporary, and subject to changes by the consignee or consignor at any time previous to the actual unloading of such property from the cars in which it is transported.

Notice of any change in consignment may be served by the consignee on any agent of the railroad corporation having the property in possession who may be in charge of the business of such corporation at the point where such property is to be delivered; and if, after such notice, and while the same remains uncancelled, such property is delivered in any way different from such altered or changed consignments, such railroad corporation shall at the election of the consignee or other person entitled to control such property, be deemed to have illegally appropriated such property to its own use, and shall be liable to pay the owner or consignee of such property double the value of the property so appropriated; and no extra charge shall be permitted by the corporation having the custody of such property in consequence of such change of consignment.

Section 5 provides that any consignee or person entitled to receive the delivery of grain transported in bulk by any railroad, shall have twenty-four hours, free of expense, after actual notice of arrival by the corporation to the consignee in which to remove the same from the cars of such railroad corporation, if he shall desire to receive it from the cars on the tracks, which twenty-four hours shall be held to embrace such time as the car containing such property is placed and kept by such corporation in a convenient and proper place for unloading. And it shall not be held to have been placed in a proper place for unloading unless it can be reached by consignee or person entitled to receive it with teams or other suitable means for removing the property from the car, and reasonably convenient to the depot of such railroad corporation at which it is accustomed to receive and unload merchandise consigned to that station or place. Nothing herein contained, however, shall be held to authorize the changing of any consignment of grain, except as to the place at which it is to be delivered or unloaded, nor shall such change of consignment in any degree affect the ownership or control of property in any other way.

Section 6 provides that every railroad corporation organized or doing business under the law of this state or authority thereof, shall receive and deliver all grain consigned to its care for transportation at the crossings and junctions of all other railroads, canals and navigable rivers. Any violation of this section shall render any such railroad corporation subject to the same penalty as contained in Section 3 of this act.

WHEAT GROWING IN INDIA.

In September, 1883, Statistician Dodge of the Government Agricultural Department issued a report on wheat growing in India, and Mr. Schofield of the Indian Revenue and Agricultural Department has recently published an answer, which the London correspondent of *Bradstreet's* criticises as follows: "Mr. Dodge, it appears, stated that the increase in the wheat area of India was insignificant, and Mr. Schofield sets himself to disprove that assertion. It turns out, he says, that Mr. Dodge based his conclusions on a comparison of the area of 1878-'79 with the areas of 1883-'84 and 1886-'87; but the figures for 1878-'79 include about 2,500,000 acres in the Northwest Provinces and Oudh, which were not, and exclude about 300,000 acres for the Punjab, which were, returned in 1883-'84, and subsequent years. Similarly, the figures for 1878-'79 and 1883-'84 exclude 800,000 acres for the alienated lands and native states in Bombay, which were returned in 1884-'85 and subsequent years. Allowing for the difference in the methods of compiling statistics (and the Indian officials are always chopping and changing about in the most confusing manner), Mr. Schofield finds that the area under wheat has been steadily expanding during the last sixteen years, the quinquennial period ending with 1882-'83, showing an increase of 66 per cent. over the one ending with 1877-'78, and the next five years giving a further increase of 10.7 per cent.

"It may be so; but how about the figures of recent years, since the price of wheat in Europe became extremely low? I have before me the final reports of the Revenue and Agricultural Department of India for 1885-'86 and subsequent years, and so far as there has been any change in the collection of statistics it tells in favor of the latest.

"These figures show that in spite of the inclusion in 1883-'89 of areas in Sind, Madras and Ajmere, amounting to 357,847 acres, and in other native states besides Baroda in the Bombay Presidency, the total for that year is less than in 1885-'86 by more than 1,000,000 acres. It is true that part of this decrease was owing to a bad season for sowing in the latter of the two years; but the total for 1887-'88 was 26,854,882 acres, or more than 500,000 less than in 1885-'86. In any great wheat-growing country an increase in area may be shown up to 1884, when first the price of wheat became disastrously low, but since that year, in India as well as in the United States and Canada, the acreage has been declining.

"In opposition to previous statements, Mr. Schofield declares that the area of other food grains in India has increased, and that the production has gained ground upon the population, so that there is now a greater proportion of the wheat of the country available for exportation. If that be the case, it is somewhat curious that there has been a considerable decrease in exports in recent years.

"The greatest quantity ever exported was that of 1886-'87, when the produce of the large area for 1885-'86, above given, was available, and since then there has been a considerable reduction. For the current year, 1889-'90 (ending with March), the quantity will probably be smaller than that of last year."

WISDOM DICTATES A HOARDING OF CORN.

Seventeen years ago the price of corn was as low as it is to-day. It was burned by the farmers all over Nebraska and Kansas, and thousands of bushels went to waste on the ground. Sixteen years ago the farmers were buying corn at 75 cents or \$1 a bushel. While there is little probability that such a bound in prices will occur in the next twelve months, the experience should not be entirely wasted. Corn cannot go much lower, and will probably be much higher. Wisdom dictates a hoarding of the present crop in Nebraska, except in cases where the farmer is absolutely obliged to sell. A little inconvenience in holding a few hundred bushels may bring a rich reward within six or twelve months.—*Nebraska State Journal*.

The imports of flaxseed during January amounted to 197,372 bushels, against 182,329 bushels for January, 1889, and during the seven months ending Jan. 31, 1890, we imported 1,007,399 bushels valued at \$1,194,323, against 779,947 bushels valued at \$921,329 for the seven months ending Jan. 31, 1889. Why do not our farmers supply the home demand for flax?

A RUMORED ELEVATOR TRUST.

A big deal is said to have been consummated at Lincoln, Neb., recently. The *Omaha Bee* says: Its magnitude can be imagined when it is stated that it is nothing less than that Harris & Co., better known perhaps as Harris, Woodman & Co., have secured exclusive charge of fifty or more of the best elevators on the Burlington system of railroads in this state. It is further said that this company is to hold precisely the same relation to Lincoln and the Burlington that the Himebaugh-Merriam Company holds to Omaha and the Union Pacific.

Since this seemingly well-founded rumor began to circulate there has been more or less consternation in the ranks of the lesser grain dealers of Lincoln and the state operation on the Burlington system of roads. Some of them express the opinion that the deal is so perfectly made that it must react upon the producer. Notwithstanding the Inter-State Law, it is stated that favors can be shown by the carrier that will make it absolutely impossible for grain dealers of limited capital to offer successful competition. Producers, therefore, cannot hope for anything but minimum prices at points touched by this company. In this connection it is suggested that the members of Harris, Woodman & Co. are far-seeing men and propose to take advantage of whatever action the State Board of Transportation may take in the matter of freight reductions. In the event of a wholesale slaughter of local rates it is argued that the roads will stand firm on the maximum through rate, and a corner on corn is therefore thought to be probable in a small way. In the other event, however, local rates remaining unchanged, it is thought that a radical reduction of the through rate on corn will be made to Chicago, without further pressure, and that producers will flood and glut the market, making possible for this company and companies equally strong to purchase their own sales. It is not improbable, it is urged, that the Burlington will do everything possible to advance the interests of a company that bids fair to be strong and shrewd enough to accomplish this end. It is well known that the Burlington, as well as all other roads operating in the state, is very sore in the matter of continued agitation of the reduction of freight tariffs, local or through, and will do anything possible to throttle further pressure. This fact gives color to the statement that the deal as stated has been made.

Such dealers as Kendall & Smith, Gregg & Kyser and T. W. Lowrey express themselves as having very little faith in this wholesale deal. They are in a position, however, to feel none of the effects if the rumor, as stated and believed by many, proves to be true.

Mr. J. F. Harris of the firm, when questioned about the deal, said: "There is nothing in it. There are over three hundred elevators on the Burlington system of roads in Nebraska and we are operating but very few of that number, not over thirty, but we will gather in more if we find them inactive or purchasable."

A CHICAGO BEAR.

Edward Pardridge, the speculator and dry goods merchant, has been the heaviest winner by the recent decline in wheat. His profits are said to be over \$250,000. He has always been a heavy trader, but at present is more of a power in the market than at any previous time during his career. He operates through about twenty brokers, and at the same time finds numerous spare moments to walk down stairs and take an occasional look at the stock boards and order 100 to 500 shares of stock bought or sold. At night, after the Board closes, he sells privileges, good for the next day, and receives a large revenue, his receipts this week being over \$5,000. Pardridge is naturally a bear, and made most of his money on that side. When Benjamin Peters Hutchinson ran his corner in September, 1888, Pardridge was wrong on the market for a long time. Finding that he could not make anything on the bear side, he quit, and went to Europe. Of late he and Hutchinson have bucked against each other for control of the wheat market, but Pardridge has generally come out ahead. His most unsatisfactory venture of late has been in oats, where he lost about two cents a bushel on over 4,000,000 bushels. He was induced to buy them because another party was in the market, and a bulge of a few cents was expected. The crowd of speculators discovered that he was long of oats, and shook him out, and forced prices for May down lower than at any previous time on this crop, and lower than for a number of years.

Queries and Replies.

Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 1. Carrying Capacity of Belts.—Will some of the readers of the AMERICAN ELEVATOR AND GRAIN TRADE kindly inform me at what velocity I must propel a 20 inch belt to carry 5,000 bushels of grain 85 feet per hour?—L. D. P., Chicago.

No. 2. Grain and Commission Houses.—I would like you to give me the names and addresses of five or ten grain and commission houses in Chicago through the columns of the AMERICAN ELEVATOR AND GRAIN TRADE.—D. D. McMILLAN, La Crosse, Wis. *Ans.*—Patten Bros., Royal Insurance Building; C. F. Listman & Co., Royal Insurance Building; Pope & Lewis, 220 Phoenix Building; Martin D. Stevers & Co., 218 La Salle street; L. Everingham & Co., 200-202 Royal Insurance Building.

No. 3. Chicago Storage Rates.—I would like to be informed through the columns of the AMERICAN ELEVATOR AND GRAIN TRADE what the new storage rates in the Chicago elevators are; also what the storage would be, say from Sept. 1 to May 1?—H. C. DAXTON, Burlington, Iowa. *Ans.*—The Chicago elevator companies did not advance storage rates the first of the year as was proposed, because such action was strongly opposed by the Board of Trade. The storage rates at present are as follows: "On all grain received in bulk and inspected in good condition three-quarters of one cent per bushel for the first ten days or part thereof, and one-quarter of one cent per bushel for each additional ten days or part thereof, until and including the 30th day of June, 1890. On all grain received in bulk and inspected in good condition on and after the 1st day of July, 1890, one cent per bushel for the first ten days or part thereof, and three-eighths of one cent per bushel for each additional ten days, or part thereof, and on all grain in store on the 1st day of July, 1890, received prior thereto the last-mentioned rate of three-eighths of one cent per bushel shall be charged, after the expiration of the ten day period which is running on the 30th day of June, 1890. On and after the 1st day of December, 1890, upon grain in good condition, storage will be at the above rate in force July 1, 1890, until four cents per bushel shall have accrued, after which time no additional storage will be charged until the 1st day of May, 1891." The storage on a bushel of grain from Sept. 1, 1890, to May 1, 1891, will be eight cents if the advertised rates go into effect. As no deduction is made for winter storage at present, the storage on a bushel of grain from Sept. 1, 1889, to May 1, 1890, would be ten cents.

HOLD THE CORN.

Hon. M. Mohler, secretary of the Kansas State Board of Agriculture, has written a letter in which he urges farmers to hold their surplus corn for higher prices. He has no faith in the efficacy of the emergency rate recently granted by the railroads, and thinks that even if the saving should all go into the pockets of the farmers it would be but a small part of what they ought to realize for their corn, and what they would realize should they hold it for a time. He thinks there need be no difficulty about the farmers who have corn getting sufficient backing to put them through until better prices can be secured. He says:

"The idea I desire to emphasize most thoroughly, because in the much that has been said on this subject the importance of farmers to hold their corn does not seem to be recognized. Corn at 12 cents a bushel is as good as gold, and under the circumstances now existing there is not, in my opinion, a bank in the state that would not cheerfully loan money at a reasonable rate on corn well cribbed or stored. Corn in Kansas at 12 cents a bushel would be good security for that amount per bushel, and that amount could be borrowed by any farmer who is honestly and faithfully working to get through to solid ground. The security is good, because corn is morally certain to be worth 18 cents per bushel in less than four months from now, and if fed to stock 25 cents or more per bushel would be realized."

The secretary claims that there is not too much corn in the world, but that too much of it is being pushed upon the market all at once, and thus prices are forced down. There is a difference of opinion on this point.

COST OF CORN CROP.

A recent report of the Illinois State Board of Agriculture in regard to the corn crop of 1889 contains some very startling statements and has elicited considerable comment. The report referred to shows that the Illinois corn crop of 1889 was worth \$58,337,049 and cost to produce \$68,272,872. In other words, if we are to believe the State Board's report, the crop cost nearly \$10,000,000 more than its total estimated value.

"In computing the cost of production of the crop," says the *Farmers' Review*, "eleven items were considered—namely: Use of land, plowing, harrowing, laying off, planting, seed, tending, gathering, cutting, shelling and marketing. The figures on all these were obtained by sending out cards to correspondents in all parts of the state and from their estimates, the totals and averages were made up. We understand that a new set of cards has recently been sent out in order to see if a new calculation will change the figures given."

"The estimated average cost of corn growing per acre last year is put down at \$9.75. For the use of land or interest on investment or plant, \$3.65, or 7 per cent. is allowed, thus putting the average value of the land per acre at \$52. Marketing, 73 cents; seed, 10 cents; and plowing, harrowing, planting, tending, gathering, shelling, etc., \$5.25."

"Now it should be remembered that the result attributed to the year 1889 is no new thing. In fact, the result similarly obtained on the last thirty corn crops in Illinois shows a loss upon sixteen and a profit on fourteen, and it is a strange coincidence that the total cost per acre as given in the official tables stands exactly \$10.50 per acre from 1860 to 1882. It has declined to \$9.75 for the crops of the last two years. The question is whether this figure is not really too high as the cost of corn per acre. Yet it would appear strange to say that it is too high when we bear in mind that no mention is made of the taxes paid by the farmer on the 6,000,000 acres devoted to corn growing. Neither does it tell how much of the labor expended was done by the land-owner and his family, and how much to hired hands receiving wages. Comparatively speaking the wages paid out would probably amount to a small sum, as the greater part of the work is done by the land-owner himself."

"Leaving these things out of account, however, more serious doubt is cast upon the accuracy of the State Board's figures by the serious lack of uniformity in the estimates of the correspondents as to the cost of production. For example, the use of the land in Green county was given on the crop of 1888 at \$4.50 an acre and in Fayette at \$1.50; Jackson gave the cost of gathering at \$2.50 an acre and Hamilton at 75 cents; Williamson gave the cost of tending an acre at \$6.50; Winnebago at \$1 and Piatt at 47 cents; Will county figured the cost of plowing an acre at \$1.62 and Kankakee at 75 cents. While the total cost of producing an acre of corn in McHenry county was given at \$16.25 it was placed at only \$5.46 in Jefferson. Gathering corn figures at 50 cents an acre in Marion county, \$2 in Du Page and \$2.50 in Jackson."

"The use of the land is figured at an average of 7 per cent. on its cash value, and this, we think, is too high for the present times. An allowance of 6 per cent. would be more correct on such a permanent investment as that in farming land. The cash value of the land is, too, a very doubtful factor, and apt to be much too high, being based upon the price asked by farmers and not that actually received. Land has not recently been changing hands freely in Illinois, and without question prices have materially depreciated in the last five years. Were the actual depreciation estimated, and 6 per cent. then charged on the true cash value of the land in corn, the results arrived at by the State Board would probably be in favor of the farmer. As it is, the figures mean that the reporters have been rating the value of land and the farmers' services too high, and the latter have had to content themselves with lower wages for their work than usual. They have also failed to make deduction for the large amount of corn fed to stock and marketed in the form of horses, cattle, sheep, swine and dairy produce; nor do they take into account the value of the corn-stalks pastured or utilized as fodder. It is an evident error to assume that the entire crop is marketed, and in addition to what has been said allowance would have to be made for the proportion of the crop of 1889 held over and marketed or used as food in 1890."

Several Buffalo firms are doing a thriving business in damaged grain. Competition is said to be very strong.

WANTS NEBRASKA ELEVATORS REGULATED.

A member of the Nebraska State Board of Transportation is credited with saying: "The elevators of Nebraska ought to be opened to producers indiscriminately for shipment of grain. As they are operated to-day it is well known that they are in the hands of middlemen at the expense of the producer. The system is wrong that puts machinery into the hands of capitalists to be operated at the expense of the producer of any state. Now, in Minnesota and Illinois elevators are open to all comers at certain fixed charges for the service performed by the elevator operators for the storing, cleaning and loading of grain for shipment to the Eastern grain markets. The rates for this service are regulated and established by a commission empowered by legislative act, and in the two states named the duties in connection with the regulation of warehouses is made additional to the duties of the railroad commissioners. The basis of rates is similar to that for transportation charges, viz., limited to a just return on the investment of capital.

"The operation of a system of elevators under regulation, as heretofore stated, secures for the producer unrestricted advantages for the shipment of his product to the competitive markets of the country, viz., Chicago, St. Louis, Duluth, etc. He is not compelled to accept the offers of local buyers, but is in a much better position afforded by the alternative of selling to the local buyers; of easy shipment to the principal markets East, or he can, if he so desires, store his grain, and upon the through warehouse receipt which he obtains therefor, is provided with an unquestionable basis for credit.

"In the case now pending before the Supreme Court under mandamus proceedings, instituted by the Attorney General to compel the obedience of an order of the State Board of Transportation in the case of the Elmwood Farmers' Alliance vs. the Missouri Pacific Railroad Company, had the board declared that common carriers are without authority to acquire and hold lands for granting to individuals special privileges for speculative profits, then the elevators already located on the Missouri Pacific depot grounds would be unable to secure a renewal of their leases at the expiration of the year; and then if the Board had followed with a recommendation to the Legislature for the passage of a law authorizing railroad companies to execute contracts for the location and operation of elevators on its grounds adjacent to side tracks, such elevators to be operated at all times for the receipt, storage and loading into cars of grain (establishing a fixed maximum price per bushel for the service), with a provision adding to the power of the railroad commission the regulation and adjustment of the rates with a view of limiting the earnings to a just return on the capital invested in elevators would have been an easy matter.

"Such a measure would be apt to meet with the hearty support not only of the grain producers, but the elevator men of the state would very likely favor its passage most earnestly, for this reason: At about all the railroad stations in the grain producing sections of the state are two and sometimes more elevators built upon railroad grounds. It is perfectly natural to suppose that their owners would grasp the opportunity afforded by the proposed law for securing a fair rate of profit on the outlay rather than undergo the heavy expense of removing and the construction of spur tracks to a new location.

"By many it will be conceded that such a solution of the elevator question would be of greater benefit to the producers of the state than the temporizing method of declaring that having allowed one person the use of its grounds in the buying and shipping of grain, a railroad must extend the same privilege to all others desiring it.

"This would absolutely shut out monopolistic tendencies, so far as grain is concerned, and firms would not be enabled to secure and gain individual control of fifty or more of the principal elevators of the state, and the great mass of producers, however poor, would always be able to get the top of the market for their products whenever circumstances compelled them to put them on the market."

The following from the *Chicago Tribune* is in harmony with the views advanced in *Daily Business* and the *Economist*: "There is a growing belief that the winter wheat crop of last year was officially overestimated by some 50,000,000 bushels. The receipts up to date do not bear out the official estimate, and there appears to be little left behind in first hands."

CHICAGO & NORTHWEST GRANARIES COMPANY.

The statutory meeting of the Chicago & Northwest Granaries Company, Limited, was held in London Monday, Feb. 17. In the absence of the chairman of the company, Sir Robert Lethbridge presided, and made an address, from which we clip the following: "As you are aware, this is simply the statutory meeting, called in accordance with the act of Parliament, and not at the instigation of the directors, for the transaction of the business of the company. The directors, however, take the opportunity to give the shareholders what information it is in their power to as to the properties acquired and the progress of the business. The company was formed about the middle of October, to take over two important systems of grain elevators in the states of Minnesota and Dakota, and having their chief depot in Minneapolis. The Minneapolis elevators were conducted by a company called the Star Elevator Company, while the country system was conducted by the Van Dusen Company.

"Minneapolis and St. Paul together number nearly half a million souls, and the country right out west, as far even as the Pacific coast, is cleared of timber and in a high state of cultivation, Dakota wheat being the finest grown in the United States, and equal or superior to any grown in Great Britain. But while agriculture has extended in this manner, and cities sprung up in a few years, it must not be imagined that villages and market towns have progressed in like manner. The railways run for miles through agricultural districts purely, and stations are marked only by small sheds and elevators, at which the trains call as required. There is no weekly market where farmers can take their grain in and sell it, and buy in return seed, salt, coal and other necessities, and it is to supply this need that elevators, as they are termed, are built.

"Now, supposing a farmer has grain for sale, he has only to take it to the nearest elevator, and he will get the market price of the day for it. There is no competition, for probably there is no other elevator within ten or twenty miles of him, and if he took it there he would only get the same price, because the price at which grain is to be taken for the day is fixed by a committee of elevator owners, who sit daily in the market centers of the grain industry, and telegraph the price fixed to every elevator. It may perhaps be thought that this lack of competition might tend toward unfair treatment of the farmer, but such is not the case. It is probably true that in past times such has been the case, for it is certain that the government of the States has fixed maximum prices for the protection of the farmer, and above these the elevator owners cannot charge. But we and our predecessors in title have never charged anything like the maximum charge allowed by law; our profits in the past have been made on charges about one-half what is allowed, and the present directors have made and have no intention of making any changes in this respect.

"Farmers are only too glad to avail themselves of the elevators, by which, allowing them the moderate profits they make, they also save considerably themselves, both in trouble and money. As I have stated, the farmer having grain to sell has only to go to the elevator to receive the same price for his grain as is ruling in the centers of the grain market, less the elevator charges and freight to the center. Now, if he wants to sell his grain direct, it is necessary for him to go to the market himself, probably 500 or 600 miles, and then he has brokerage to pay, and these charges would probably be more than the moderate charges of the elevators which are handling the grain in bulk. But in addition, he may probably find that there is no market in grain for present delivery, and has to sell for forward delivery. If he is a rich man, and does not want the money, he will suffer no additional disadvantage from this, but if, as is generally the case, the farmer can well afford to use all his money on his farm, it is then necessary to send his grain to a terminal elevator, such as our Star Elevator, which is under state supervision, and can give warrants for the grain, on which, with the brokers' sale note, he is able to obtain say 75 per cent. advance from his bankers. But see what enormous trouble and worry, in addition to the large expense, he is saved by using a country elevator. And that brings us to a question in regard to our working capital. That is by no means an insignificant sum, being no less than 100,000, but this, I may tell you, is only sufficient to provide at the busiest portion of the year the margin required to carry the immense quantities of grain

we handle. When this is stated, it might appear that we were indulging in risks in carrying so large an amount of grain, partly on borrowed money. Such, however, is not the case. As stated before, the price fixed for purchase is one sufficiently below the ruling cash price of the day to pay our elevator expenses, freight, and give us reasonable margin of profits; but operators are more anxious to deal for future delivery than for cash.

"Wheat, although it all comes into store in September and October, is not all for use in those months, but for February, March, April, May, and onward, till the new crop is ready. Now, persons who want to buy for future use we are quite willing to accommodate, because it keeps our elevators full, and we are paid for the storage of the grain, and they also pay us a fair profit on the interest of the money for which we wait. Even then there might be element of risk, because our purchaser might fail, and the price of grain fall in the meantime. But this we prevent by the maintenance of a margin, and thus protect ourselves beyond what appears to be any possibility of risk. The accounts which our auditors prepared for us show most clearly that these measures have protected our predecessors in the past, and they cannot fail to protect us in the future. We are, in fact, the bankers of the farmers, with this difference, that whereas the banker lends on bills and documents, which he can put away in his safe, and therefore obtains only the interest on his money, we lend our grain, which we hold as security, and on which we are able to charge—and fairly charge—a reasonable but remunerative amount for storing."

DEFAULTING ON CONTRACT.

During the past five years it has been of quite frequent occurrence on behalf of outside parties to accept all the profits which they have made by speculating in grain and provisions, and when they strike an unfortunate trade and sustain a loss—in most cases the result of trading beyond their means—they quietly settle down and refuse to pay the commission merchants through whom they transacted their business, and who have been compelled to pay for the property when delivered, or may have settled the contracts with his fellow members.

It is safe to say that the laws of Illinois and the courts of this state, have invariably sustained the validity of contracts in produce for future delivery, and there is a determination on the part of commission merchants here that they will no longer submit to being defrauded by parties who accept while they gain and who plead the "baby act" or "gambling act" when they lose. They will execute the orders received promptly and as satisfactorily as possible for their customers, pay such profits as may be realized, and will expect losses as promptly adjusted. They will insist that the business must be conducted on equitable principles for all parties interested.—*Chicago Daily Trade Bulletin*.

"CHICAGO AND NORTHWEST GRANARIES."

Many of the American enterprises floated last year seem to be doing remarkably well. A group of three, which appeared under the same auspices, have recently announced reassuring facts to their shareholders. Another of the group, the Chicago and Northwest Granaries, according to the report of the statutory meeting, appears to have done well and to be within a measurable distance of paying its first dividend, although only established about four months. The chairman of the meeting on being asked how he accounted for the shares of the company being at a discount, stated that he presumed it was because holders were nervous, and did not care to wait for the good things in store for them. We think a more correct reason is that investors subscribed for too many shares of various companies toward the close of last year, and having to sell some of their holdings to pay the calls on others, naturally selected those for sale which stood at a premium, and on which they were consequently able to secure a profit and ready cash at the same time. Eastmans also, in spite of their brilliant prospects, went to a discount immediately after allotment, and we shall not be surprised if Granaries continue to follow their example, reaching a big premium so soon as the directors are able to state definitely the real position of the company's affairs. It is to companies like these that investors would do well to turn their attention now. They are as cheap as new issues, and possess the advantage of having, to some extent at least, justified their existence.—*Financial Times, London*.

ELEVATORS AT FORT WILLIAM, ONT.

The two great grain elevators of the Canadian Pacific Railroad Company at Fort William, Ont., are the most conspicuous objects for miles around. A writer living at Port Arthur, four miles distant, says that "Often when the morning mists lay in the valley, covering all the woods and other objects from view, the tops of these gigantic storehouses were seen rising above the mist like islands out of the sea."

Fort William is situated near the mouth of the Kaministiquia River, which empties into Lake Superior, and is at the head of the water communication with the Eastern seaboard, so that the situation is admirably chosen, and offers the best facilities both as a collecting and distributing point. The two elevators are known as "A" and "B," and the one is exactly a duplicate of the other. They are built of wood, and covered outside with corrugated sheet iron, painted brown, and have each a capacity of 1,250,000 bushels. They are each 315 feet long, 85 feet wide and 135 feet in height. The boiler house, smoke-stack and engine house are at the east end of elevator "A." The railroad track runs through the building, and the ground floor contains the receiving shoots, the elevator boots, four of Barnard & Leas' Dustless Warehouse Separators, a large scourer and polisher for cleaning smutty grain, with the shaft for driving these, and the great driving pulley, 7 feet in diameter and 4 feet in breadth. The main driving belt is 42 inches broad and runs up and over a 12-foot pulley at the very top of the building. There are nine receiving shoots, with elevators 30 inches wide in the legs, each bucket lifting one third of a bushel of wheat, and there are six shipping ele-

the receiving hopper is the weighing hopper, the bottom of which can also be opened or shut by moving a lever.

These machines weigh 400 bushels at once. They are attended by a man who, when the indicator points to the amount, shuts the receiving hopper and opens the bottom of the weighing hopper, when the grain runs into the hopper above the table and is there directed to its destination, the receiver meantime holding the wheat till the weigher is empty. The fifth floor contains the elevator tops and the main driving shaft, which runs the whole length of the building and gives motion to the fifteen sets of elevators, and is itself set in motion by the great belt that comes up from the engine shaft far below. The elevators are built close to the river, a narrow wharf runs along the whole length of the building, and the steamers that carry the grain to the last are moored to the wharf and loaded with grain through iron spouts from the six shipping elevators. Wheat, oats and barley are all collected and stored here. From time to time the grain is run through the elevators from one bin to another.

These great storehouses are complete in every respect,

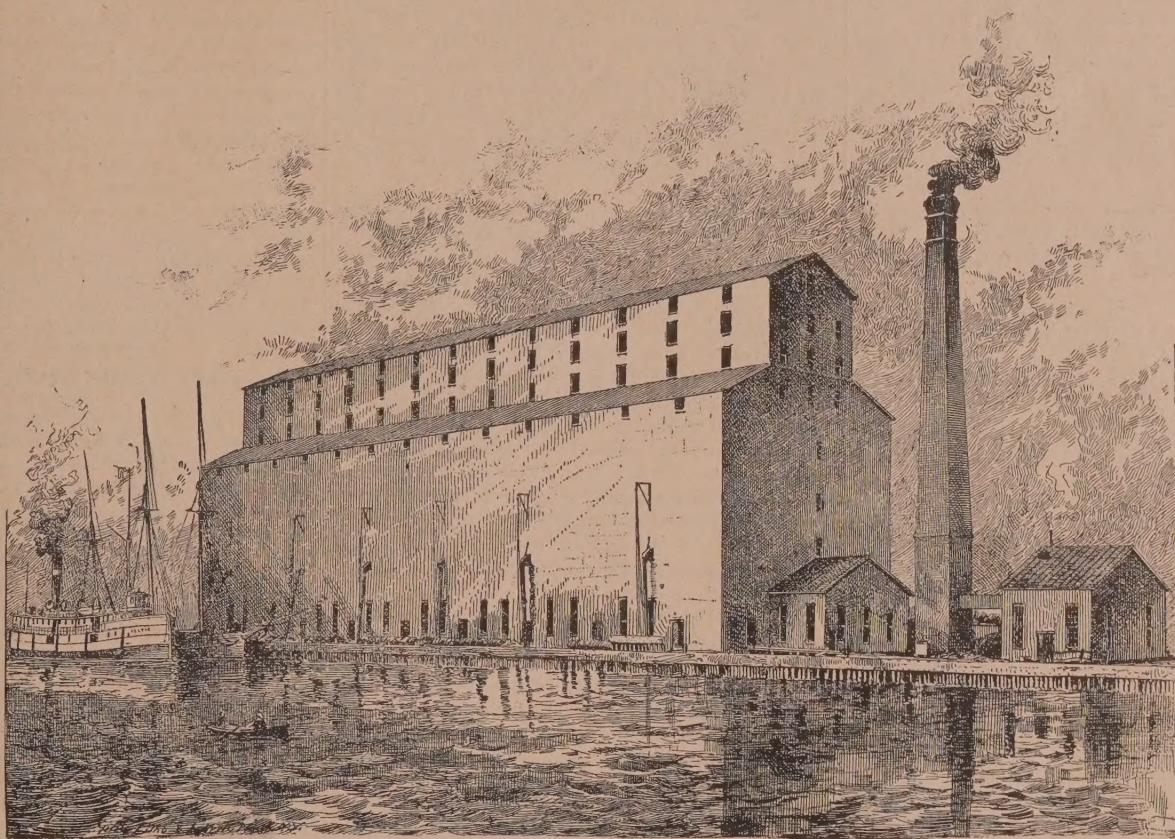
Manitoba and the West, so that the likelihood is that more elevators will soon be built there."

PREVENTION OF SMUT.

A sure, cheap and simple method of preventing smut in grain has been discovered, so the marketing of smutty grain by farmers is inexcusable. If they continue to bring you smutty grain call their attention to the following method of preventing it:

In May, 1888, Prof. Jensen, Director of Bureau Ceres, at Copenhagen, Denmark, published in the *Gardeners' Chronicle* an account of a new method of preventing smut in cereals. He simply dipped the seed in hot water at a temperature of 132 degrees F. The seed was first warmed in water of a temperature of 90-100 degrees, and was then placed in water at 132 degrees. The basket containing the seed was raised out of the water eight or ten times, and after the seed had been treated fifteen minutes it was removed and plunged in cold water. The result was that all the smut was destroyed, while the seed was in no way injured.

Prof. W. A. Kellerman, of the Kansas Experiment Station, states that his own experiments confirm these results and he gives the following directions for carrying out the Jensen hot water treatment: Provide two vessels for the hot water, of size suited to the amount of seed to be handled. A sack should be made of loosely woven cloth so as to admit the water freely, and of size suited to the vessel in which it is to be used. Vessel No. 1 (or the stove reservoir) is to be filled with water having a temperature of about 100 degrees to 110 degrees F. Vessel No. 2 should contain water at a temperature of 132 degrees, and should remain on the stove so that this temperature can be maintained. The seed grain is to be



ELEVATOR "A" AT FORT WILLIAM, ONT.

everything being planned with the view of handling the vast quantities of grain with the smallest amount of labor and cost. The charges for cleaning, storing and shipping grain at these elevators amount in winter from one to two cents per bushel, according to the length of time it continues in store, and in summer from one-half to three-quarters of a cent.

The two elevators at Fort William, and the one at Port Arthur, having a combined capacity of about 3,000,000 bushels, are now found to be too small for the rapidly increasing trade, and the company are about to build an addition to elevator "B," which will increase its capacity by another 1,000,000 bushels. The wheat is collected at the various stations and smaller elevators of the Canadian Pacific Railway in the West, and sent on per rail to Fort William and Port Arthur, where it is shipped in the lake steamers to the East. Many of these steamers are upward of 2,000 tons' burden, and are fitted up with every convenience and comfort for passengers, as well as for goods traffic; coming up they have general cargoes, and take grain down.

"Port Arthur and Fort William, standing at the head of the water communication from the East and at the gateway of the great West," says a writer in *The London Miller*, "seem destined in the near future to become the center of the Canadian grain trade. The new railway now building (the Port Arthur, Duluth & Western) will open up the fertile valleys of the Slate, the Whitefish and the Rainy rivers, and will be a competing line from

inclosed in the sack, and then put into vessel No. 1. The object of this immersion is to heat the grain so that when it is removed to vessel No. 2 the temperature will be but slightly reduced. A few minutes' immersion in vessel No. 1 will therefore be sufficient, after which the sack of grain should be immersed in vessel No. 2. After a minute or two it should be lifted and stirred about so as to insure contact of the hot water with every grain. This should be repeated several times—oftener, the larger the quantity being treated. After fifteen minutes the sack should be lifted from vessel No. 2 and plunged immediately into cold water for the purpose of cooling it quickly. Another portion of the grain can then be treated in a similar manner, and so on until the entire amount has been handled. After drying it will be ready for planting. It is evident that to be effectual, this treatment must be thorough, and care must be taken to keep the water in vessel No. 2 at about 132 degrees—at no time should it be lower than 130 degrees, nor higher than 135 degrees. A common thermometer with plain scale may be used, but the more sensitive the instrument the better. The seed after treatment must be thoroughly dried before it is stored in bulk or planted with the drill. It can be sown broadcast as soon as the grains are dry enough to separate readily. The seed may be treated at any time in the fall or winter, or immediately before planting.

A train of barley consisting of thirty carloads was shipped East from Chicago by one firm recently.

The wheat arrives in the cars in bulk; the cars are run to the shoots, a door is opened in the side, and the car is emptied into the shoot by shovels worked by ropes. A car is emptied by these in a few minutes. The machinery is capable of handling 50,000 bushels per day. The wheat is inspected by the government inspector and graded No. 1, 2 or 3 hard, or 1, 2 or 3 Northern or frozen, as the case may be. The greater part of the wheat last year graded No. 1 hard, and was splendid quality. The wheat is weighed and cleaned on the separators, and then run to the storage bins. There are 205 bins, each 12 feet square and 60 feet deep, having a capacity of 5,000 bushels each. The space between the first and second floors is entirely taken up with the bins and elevator legs and the massive timbers which support the bins.

The second floor is a perfect wilderness of spouts and timbers. The third floor is what is termed the table floor; there are nine tables or circular platforms; around the circumference of these are the openings to the spouts which carry the grain to the different bins. Above the center of these tables is the circular bottom of a bin or hopper having a traversing spout, which can be moved round to any opening on the circumference of the table. The fourth is the weighing floor. Above the weighing machines is a receiving hopper, the bottom of which can be opened or shut at pleasure by moving a lever. Below

RUSSIA AS A GRAIN EXPORTER.

In referring to an abstract of a report on the grain trade of Russia, recently published by the Railway Department of the Russian Ministry of Finance, the *London Miller* says: It is clear that, however backward the Russian agriculturist may be as compared with the American farmer, Russia possesses officials capable of taking a broad and scientific view of its potential cereal wealth—a capital capable under intelligent guidance of almost indefinite development. The writer of this report deplors the comparative untrustworthiness of Russian agricultural statistical returns, but he assures us that even the figures gathered from the interior have a rough value, being to a great extent confirmed by the "tables of exports, in which no figures are published which are not absolutely authentic." He derides the notion that there has been no perceptible advance in Russian agriculture during the past two decades, and points to the fact that within that period the export of Russian wheat has increased to the extent of 200 per cent. He maintains that not only has the cultivated area largely spread, especially in the southeastern portion of Russia, where the rich black earth region lies, but that "here as elsewhere the methods of cultivation are improving, and as a natural consequence the harvests are more abundant and more regular." Whereas the average harvest in European Russia (with the exception of the Polish provinces) of all kinds of cereals was estimated for the years 1870-'79 at 1,614,000,000 pounds (the pound is 36 pounds avoirdupois), it has risen in 1883-'89 to 1,749,000,000 pounds, which is an increase of 8 per cent. The quantity exported of these harvests was only 14.7 per cent. in the former period, while in the latter it has risen to 20.5 per cent.

The weak point of Russian agriculture as compared with that of its great rival, the United States, is the insufficient utilization of wheat, the most valuable of crops from an exporting point of view, as far as wheat is concerned, the United States more than doubles the crop raised by Russia. A clear view of the relative cereal production of each country will be best obtained from the following table:

	Russia, chetwerts.	United States, chetwerts.
Wheat.....	37,000,000	79,000,000
Rye.....	112,000,000	4,300,000
Oats.....	59,000,000	112,000,000
Barley.....	22,500,000	10,400,000
Maize.....	3,000,000	295,000,000

A chetwert is equal to 5.77 bushels. By this table it is most instructive to place another showing the average cereal exportation of the two countries from 1883-'87:

	Russia, Pounds.	United States, Pounds.
Wheat.....	130,800,000	213,900,000
Rye.....	75,100,000	3,600,000
Oats.....	51,300,000	2,700,000
Barley.....	43,400,000	900,000
Maize.....	21,900,000	81,200,000

It should be explained that the above wheat exports might in both cases be termed breadstuffs, as they include wheat exported in the form of flour, but while the proportion of such flour in the case of Russia only reached 2 to 3 per cent, the United States ratio of flour was 36 per cent. of the total wheat export. It will be obvious that Russia grows twenty-eight times as much rye as the United States, and this great disparity is due to the fact that the sandy nature of the soil in Northern Russia, as well as in the major portion of the central belt, is extremely unfavorable to the cultivation of wheat, and gives the agriculturist hardly any choice but to raise rye. On the other hand, this cereal is largely consumed by the peasantry, who bake it into what is termed "black bread," a sort of cousin of the Westphalian "pumpnickel."

The Russian rye is so highly esteemed in Germany that nearly one-half of Russia's large export of this cereal goes to that country. It is a question whether the phenomenal exportation of rye from Russia, amounting, it is said, to 87.9 per cent. of the total export of the world, does not depress prices in this market, to the disadvantage of the Northern power. For oats and barley Russia's best customer is Great Britain, but Germany again comes to the fore when wheat is in the question, of which she takes 29.6 million pounds, being closely followed by Great Britain with 24.7 million pounds, while Italy, France and Holland respectively consume 22.4, 17.7 and 14.7 million pounds. According to the statistics prepared by the Russian Ministry of Finance, the total cereal exportation of the world from 1883 to 1887 amounted to 913.3 million pounds, the largest slice of this trade, namely 35.5 per cent., falling to the lot of Russia, while the United States follow

on her heels with 33.1 per cent. and the other exporting countries, such as Roumania, India, Austria-Hungary, and the Argentine Republic, with their respective percentages of 8.5, 7.5, 4.3, and 3.6, make by comparison a poor show.

One of the sharpest points of difference between the United States and Russia is to be found in their respective treatment of maize, which the former country raises in enormous quantity, and retains (with the exception of a 4 per cent. exportation) for domestic purposes, whereas Russia only grows a three-hundredth part of this crop and exports two-thirds of it. The wisdom of the latter policy is questioned by the writer of this report, who would have Russian agriculturists lay themselves out for the exportation of wheat, while reserving such cereals as maize, barley and oats for stock feeding.

It is evident that the more advanced Russian farmers are giving more and more attention to wheat, which, to use an American expression, they hold as "king." Under the circumstances, one is rather surprised not to find some reference to the extension of railways in South Russia; and especially to the lines that will, it is hoped, soon link the new Caucasian port of Novorossisk (open all the year round) with a fertile district of black earth soil some 5,000 square miles in extent. It is true that this district has only a population of 3,000,000 souls at the most, and it is probably the comparative scarcity of labor in the black earth districts which has retarded the development of wheat culture in South Russia. But that is an evil which time will cure.

Among the questions here treated, the comparative cost of wheat-raising in Russia, India, and America holds a prominent place. It is calculated that while it costs Russia 10 copecks (a copeck is equal to .00558 cents in United States money) per pound of 36 pounds more to grow wheat than India, she has an advantage of 8 copecks on the same weight as against the United States. Freight is made out in favor of Russia, but insurance is admitted to be against her, and altogether it is estimated that the pound of wheat transported and sold in London costs the Russian producer 2 copecks less than the Hindoo, and 8 copecks less than the American. But we are informed that this advantage is more than counterbalanced by all kinds of expenses and commissions, which swallow up the profit of the Russian agriculturist. It would be interesting to know somewhat more concerning these "thieves in the candle."

The higher level of prices generally reached by American wheat is, rightly enough, attributed to the better condition in which it reaches our shores as compared with the product of Russian fields. But scarcely sufficient attention has been directed to the immense advantage enjoyed by America, with its complete systems of elevators and its army of inspectors, whose grading has probably done more than aught else to push American wheat into the high position it enjoys in all European markets. Strange to say, there is no mention of the two American elevators which have already made their way into Russia, nor of the third which it is hoped to open at Odessa in August next. This seems the only notable omission in a singularly complete monograph.

"ACKNOWLEDGE THE CORN"

The phrase "acknowledge the corn" is variously accounted for, but the following is a true history of its origin: In 1828 Alexander Stewart, Member of Congress, said in a speech that Ohio, Kentucky and Indiana sent their haystacks, cornfields and fodder to New York and Philadelphia for sale. Wickliffe, another member, called him to order, declaring that those states did not send their haystacks and cornfields to the Eastern cities for sale. "Well, what do you send?" asked Stewart. "Why, horses, mules, cattle and hogs." "Well, what makes your horses, mules, cattle and hogs?" queried Stewart.

"You feed \$100 worth of hay to a horse, in doing that you just animate your haystack and get on top of it and ride off to market. How is it with your cattle? You make one of them carry \$50 worth of hay to the Eastern market. How much corn does it take to fatten a hog, Mr. Wickliffe?" "Thirty-three bushels," replied the man from Kentucky. "Then you just put thirty-three bushels of corn into the shape of a hog and walk him off to market," said Stewart. At this point in the debate Wickliffe sprang to his feet and exclaimed very hurriedly: "Mr. Speaker! Mr. Speaker! I acknowledge the corn." The incident caused quite a laugh among the members and was never forgotten.

A WHEAT RUST DESTROYER.

In the last issue of *Insect Life* published by the United States Department of Agriculture, F. M. Webster has a very interesting article on "A Podurid which Destroys the Red Rust of Wheat," which we give herewith:

"In studying the insect enemies of our cereals during the last five years we have repeatedly come in contact with a small robust species of *Smythurus*, both in the field and in breeding cages. From the fact that we have several times reared the species in cages containing only growing grain and insects preying thereon, and were not able to detect them destroying either one of these, we have been perplexed to understand from what source these little Neuropters obtained their subsistence. During the present year, however, we have twice found individuals feeding upon the Uredo spores of the common wheat rust, *Puccinia rubigovera*, in both instances on wheat growing in the field and at times when the rust was first making its appearance on the leaves. While these observations clear away some of the obscurity surrounding the food habits of these insects, their economic importance is as uncertain as before. We are free to suppose that all rust spores eaten by these insects are destroyed, and to this extent they are benefactors. But their bodies being covered with short bristles, and being such gormandizers in their method of feeding, with every repast they manage to get great numbers of spores caught among the bristles on their bodies, and these spores, it is fair to suppose, are carried away and probably become detached one time and another, more or less of them being left on plants not previously affected by rust. Early in the fall, when rust is only commencing to appear on the young wheat, these *Smythurus* might destroy many spores, but we have observed them enough to leave no doubt that they transfer spores from one plant to another in the manner indicated."

JAPANESE BUCKWHEAT.

A correspondent of the *Michigan Farmer*, who has had experience raising Japanese buckwheat, says "it is much more productive than either the common or silver hull varieties. Many say more than twice as productive. In case of very dry seasons I am sure that it is much more than twice as productive. The kernel is also much larger than that of either of the other varieties. The Japanese will also stand the drought much better than the other kind. Last summer, which was an exceptionally dry season in Michigan, I had a very fair crop of Japanese buckwheat on both heavy clay and very light land; while both of the other varieties on much better land—in experimental plats—did almost nothing; were not worth harvesting. Then it is safe to sow this variety in June. I have had just as good success the past two years sowing before the middle of June as in sowing July 1. Thus with this variety we may hope always to escape frost. The Japanese also matures in less time than do the other varieties. I have known it to be ready to cut two months from sowing.

"I wish to urge one caution to those who grow this grain; that is, that the other varieties should not be grown close beside this one. I should expect it would mix if close beside the other kinds, and the seed be thus much injured. It should be kept wholly pure."

Elevator men in districts where buckwheat is produced should procure some of this variety of buckwheat and have the farmers try it.

RAILROADS DEPRESSING THE CORN MARKET.

Mr. T. W. Lowery, a prominent grain dealer of Lincoln, Neb., in a recent interview, said: "The railroads are telling us that this 10 per cent. reduction which they so graciously granted to the people is depressing the market. I assure you that this is not true. I know that the railroad people and other speculators are selling options for future delivery which they never expect to deliver—not a bushel of it—and they are doing this, too, with the very object of bearing the market if possible, so as to prove what they asserted, that a reduction in freight rates would not benefit the farmers. This option business should be stopped.

"I have contended ever since the roads raised the price on us after the taking effect of the Inter-State Commerce Law that these rates were too high. Before that time, counting the rebates, we shipped corn for about half the present rate, and I am satisfied the roads were making money."



[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interests of the trade at large, or any branch of it.]

NEW ELEVATORS IN TEXAS.

Editor American Elevator and Grain Trade:—There will be a large number of elevators and mills constructed in Texas this season if wheat comes in good. Please send us a sample copy of the AMERICAN ELEVATOR AND GRAIN TRADE.

Yours truly, WM. SCARBOROUGH,
Iowa Park, Tex.

WAREHOUSEMEN AS GRAIN DEALERS.

Editor American Elevator and Grain Trade:—Your article in the February number, entitled "Public Warehousemen as Grain Dealers," is a most excellent production, and if our local papers would assume the same spirit, receivers here would soon be relieved of a difficulty they now labor under on one side of our harbor.

Yours, etc., M. J. & W. A. BROWN.
Baltimore, Md.

THE TERMINAL STEAL.

Editor American Elevator and Grain Trade:—I have just received and read your AMERICAN ELEVATOR AND GRAIN TRADE for the month of February and have been much interested in many of the articles on the abuses suffered by country shippers. The "terminal steal" is one of the greatest outrages that we have to contend with, and I can see no other remedy than that railroad companies be compelled to deliver at destination points every pound of produce originally loaded in cars, for which the shipper should have pay. A large proportion of the profits of the shipper go with the shortage at the other end of the line. If this evil could be remedied and the boards of trade abolished, I think we would see the beginning of an era of prosperity for the country shipper as well as the producer.

Yours truly, W. W. GARDNER.
Rock Rapids, Iowa.

ROOFING SPECIFICATIONS

Editor American Elevator and Grain Trade:—In bringing out our roofing plates stamped with the brand and thickness, and doing away with the waster sheets of same, it was the object of this house to put upon the market not only an article which the architect could specify with security, but also one that would enable the property owner to receive what he was willing to pay for. There is to-day a difference of almost 100 per cent. in price between the poorest and the best roofing plate in the market. Nearly every brand is imported of two different qualities; that is, good plates and bad, or wasters. It is absolutely necessary in these days of competition that specifications should be drawn as to hold each roofer up to his contract. Even the soldering of a roof is such an important matter that the roofer who uses soldering irons weighing but four pounds to the pair cannot possibly apply the amount of solder to the square that should be used; consequently heavy soldering irons should be used so as to allow the solder to soak well into the seams, where a first-class job is wanted. The very best material if not properly put on would make the roof a failure. Our object is to assist the architects all in our power, and with this idea in view we have drawn up specifications for both a flat and standing seam roof, of the two sizes of plates, which we think will be an aid to every architect who desires to use tin for roofing.

The specifications that we have drawn up are simply intended as a reference for the architects, and while we have inserted our brand of "Merchants' Roofing" in same, yet any brand which the architect may choose to use can, of course, be written therein. This formula has not been written by us with any intention of dictating to the architect, but rather to assist him in specifying for a roof that will last, as it should, for years, while the majority of tin roofs put on to-day will not last five years before repairs commence.

Again, the present competition among roofers is such

that a roofer who desires to make a first-class job and use good material stands but very little chance of obtaining the contract unless he is better protected by the architect in his specifications.

Yours very truly, MERCHANT & CO.
Philadelphia, Pa.

SHORTAGES IN SHIPMENTS.

Editor American Elevator and Grain Trade:—I would suggest that you publish the Illinois law in regard to the responsibility of railroads as to shortages in shipments of grain, in your journal, for the benefit of country shippers, and call the attention of the trade to it. It will undoubtedly be of interest to a great many. In this connection it occurs to me that Illinois shippers may perhaps be gainers by this law, while shippers making consignments from other states, thus making shipments inter-state, would derive no benefit from the law. The agitation of the question in general will do no shipper harm. Some will surely be benefited, and, perhaps, all of us made wiser if not richer.

Western shippers have succeeded this winter in getting an immense amount of their grain around Chicago, but the time will soon be at hand, owing to lake navigation, when we will be compelled to ship the great bulk to Chicago. Of course, it mostly goes through Chicago elevators, and if some reform is not effected we will have to stand their bleeding processes. It is to be hoped that the railroads and elevators will, in practice at no distant day, grant that the shipper of grain has some rights which they are bound to respect. We don't say or mean to be understood as saying, that all demands are reasonable or just, but country shippers are a long way short in receipt of justice. Go ahead, gentlemen, in your good work. You are gaining friends among shippers in the West. Then, too, give the Chicago Receivers' Association a few shakes. Their natural friends from a business standpoint, are in the country, yet the fact remains that they have been knuckling to the dictates of the professional speculators.

Yours truly, E. D. VORHES.
Cushing, Iowa.

THE LAW IS DETRIMENTAL.

Editor American Elevator and Grain Trade:—To your inquiry as to what way the Inter-State Law has proven detrimental to the grain shippers, I will say that prior to the time that this law went into effect, the Northwestern Elevator Company, which purchases wheat exclusively in the country in its lines of elevators extending from Minneapolis to the Manitoba boundary line, was able to ship wheat to interior points in all the states lying east and southwest of us, for the reason that while we are not located on a line of railway having through lines eastward, we were enabled to get local rates from the lines of railway terminating here and which don't penetrate the territory beyond this city, which enabled us to compete with the few lines of railway in the Northwest having through lines to the East, the railways last named having in effect a transit system which permitted the shipper from the interior to bring his wheat to this market and ship it or its product forward at a rate which was less than the two local rates made by roads terminating here doing business in the Northwest combined with the rate of the lines terminating here and extending eastward and southward of Minneapolis.

In other words, the lines of railway terminating here and extending into the territory south and east of us were enabled to adapt their rates to meet the contingencies of the case, so that the producer of the Northwest could have free and open markets to all points east and south of us. When the Inter-State Law went into effect these roads were prevented from making such rates or adapting their rates to meet the contingencies of the case, so that the farmer who was located on a line of railway terminating at Minneapolis is at a great disadvantage as against farmers located upon a line of railway having through connection from the West to Eastern points and having in effect this transit system.

Wheat on track in this city arriving from roads with a transit rate commands a price equal to about two cents per bushel more for shipment to certain Eastern points than can be had for wheat grown along other lines of railway. We are located on the Manitoba Road. The tariff rate to Minneapolis added to the tariff from Minneapolis forward to any given point eastward would be greater than the rate charged for transporting the same wheat over the Milwaukee Road to the same points eastward, and we cannot get any relief from railways whose

eastern terminus is Minneapolis, since the Inter State Law went into effect. I believe that the Inter-State Law is a damage to the country, because it prevents the railways from adapting their rates from peculiar conditions, which becomes necessary in order to give the public in districts of the country opportunities to do business on equal terms. The case I have cited, I think, illustrates this point.

Yours truly, A. B. ROBBINS,
Manager Northwestern Elevator Company.
Minneapolis, Minn.

IMPORTS OF BREADSTUFFS.

During the month of January we imported breadstuffs valued at \$497,956, against \$659,208 for January, 1889, and for the seven months ending Jan. 31, 1890, we imported breadstuffs valued at \$3,986,038, against \$5,612,460 for the seven months ending Jan. 31, 1889, showing a falling off for the seven months of nearly \$2,000,000 in the value of the breadstuffs imported. However, there was not a decrease in the amount of breadstuffs imported, but a small increase. The falling off in the value is due to the decline in the market value of all grains, and especially of barley, which is the principal grain imported.

During January we imported 182 bushels of wheat, 295 bushels of corn, 824 of oats, 8,036 of rye, and 1,079,057 of barley, against 85 of wheat, 104 of corn, 1,915 of oats, no rye, and 1,002,456 bushels of barley during January, 1889.

The imports of wheat for the seven months ending Jan. 31 were 110,651 bushels valued at \$79,052, against 130,158 bushels valued at \$118,411 for the seven months ending Jan. 31, 1889. During the same period 7,235,923 bushels of barley valued at \$3,743,811 were imported, against 7,399,619 bushels valued at \$5,372,150 for the seven months ending Jan. 31, 1889.

The imports of corn, oats and rye for the seven months ending Jan. 31, 1890, were 1,122 bushels, 11,232 and 72,907 bushels respectively, against 922 bushels of corn, 14,165 of oats, and 12 bushels of rye for the seven months ending Jan. 31, 1889.

FOREIGN DEMAND FOR CORN.

Corn shipped from this port has given great satisfaction in England, according to the reports from Liverpool and London receivers, who state that as long as the price continues low there will be an unlimited demand for it. The consumption of corn has become so general in the United Kingdom that it will be very difficult for consumers to do without it, and from all that can be gleaned from letters received of late from the other side, nothing short of high prices will be able to check the demand. It is also contended that present prices are abnormally low, and that a reasonable advance may be anticipated without putting the least restraint upon consumption. The recent rise in the price of Indian corn in Chicago is said to be due principally to the large foreign demand.—*Montreal Trade Bulletin.*

FOR SAVING DAMP GRAIN.

In open winters like this has been we hear many complain of their grain spoiling in the bins or corn spoiling in the cribs. Where the grain has been harvested moist or the corn is soft and is put at once into a large crib, it is almost sure to become moldy and spoiled. Every year a good deal of grain is rendered useless in this way, and during this winter the losses have been unusually heavy. There are several methods of preventing this loss, which many have tried and pronounced successful. One is to intersperse dry brick through the mass of grain, enough to absorb all superfluous dampness. The absorbing properties of brick are well known, and a few of them are sufficient to dry out a large amount of grain.

Another method often used in Central Illinois is by drain tile. A few drain tile placed in the middle of a crib of damp corn are very effective in disposing of the extra moisture. The tile should be placed upright and one upon another, so that a current of air can pass readily up through the crib while the tiles themselves absorb a great deal of moisture. Of course this contrivance is as effectual in small grain as in corn. A few rails placed across the crib at medium height so closely together that the corn when it is thrown into the crib will leave an opening beneath them is also very successful for taking the moisture out of damp corn.

Trade Notes.

A company has been organized at Audubon, Iowa, with a capital stock of \$50,000, for the purpose of erecting a factory for manufacturing the Eclipse Grain Meter.

N. P. Bowsher of South Bend, Ind., manufacturer of Bowsher's Combination Feed Grinding Mills, is enjoying an excellent trade. Those in search of a machine to grind ear corn, all kinds of small grain, oil cake, etc., and requiring a light-running machine will do well to address N. P. Bowsher, South Bend, Ind.

The announcement notice of the Crane Company, contractors and builders of grain elevators of Minneapolis, brings to our notice three well-known elevator men in the Northwest. Mr. Tromanhauser, the mechanical engineer of the company, is one of the best designers ever engaged in the business, having perfected the plans of some of the largest and best equipped grain elevators in Minneapolis. Mr. Houstain, the superintendent of construction, has always been in the business of building grain elevators and has had as much practical experience in this special line as any one engaged in the business. As for Mr. Crane, we can say that he has been engaged in the business of manufacturing grain elevator machinery and supplies for the past ten years and has always made it a special business in Minneapolis. It is safe to say there is no one better or more favorably known in a general way among the grain men of Minneapolis and the Northwest than Mr. Crane. The combination of these practical and experienced men forms a most excellent company and insures success. Minneapolis and the general grain trade of the Northwest are to be congratulated, as these men bring to them all the desirable requisites for the construction and equipment of grain elevators.

The Sioux City Engine Works have just started up work in their new buildings at Leeds (Sioux City's new manufacturing suburb). The foundry has been in operation for some little time, and has fully four times the capacity of their old foundry. This will enable them to make a specialty of foundry jobbing and heavy contract work. They have fitted up their machine shop with rope transmission throughout, also with one of the Buffalo Blower Company's larger heaters and blowers for warming their buildings, and will put in one of the Hawkeye Electric Manufacturing Company's Dynamos for lighting their works. They have already placed some orders for new tools and are selling off quite a number of their old tools, to be replaced by heavier and stiffer machines of later design. The object is to thoroughly equip these works with the most improved machinery, thereby putting them in condition to compete with any works of the kind in the country, as they now have the largest and best arranged plant for their specialty of any company west of the Mississippi River. They have recently issued a new boiler circular showing the types and sizes of boilers they build, together with a very neat, in fact, handsome design of fronts. They will make a specialty of high grade boilers, without trying to compete with the cheaper class of trade, their object being to aim for quality first, and to take a position of first rank in the country for quality on both engines and boilers.

HIGH PRICES FOR BROOM CORN.

The tendency of the prices of broom corn is upward. The prices of broom corn at present are between \$20 and \$30 a ton higher than they were at the corresponding period last year. Still the demand is not as brisk, and the general quality of the present crop is much inferior as a whole. The extremely unfavorable rainy weather made sad havoc with the bulk of the crop. Besides being off in color this year, much of it is coarse and curly. Buyers are slow in purchasing, and the demand is rather light. If the market improves as the trade anticipate, it will give crop matters a different aspect next season. It will be a powerful incentive to increased acreage.—*Grocers' and Canniers' Gazette, Boston.*

According to the *Investigator*, sixty elevators valued at \$1,428,700 and insured for \$1,032,200, six granaries valued at \$24,000 and insured for \$10,700, three grain warehouses valued at \$366,000 and insured for \$118,000, and one grain and lime warehouse valued at \$11,000 and insured for \$9,000, were destroyed by fire during the year 1889.

THE GRANTING OF ELEVATOR SITES.

The agitation of this question, which is of vital importance to elevator owners, is not confined to Nebraska alone. The Minnesota Railroad and Warehouse Commission in its annual report complains of the failure of the legislature to pass a law providing for the condemnation of land along the lines of railroads where the people desire additional railroad facilities. In its report the commission says:

"Applications still continue to be made to the commission, asking its assistance to compel railroads to grant sites for grain houses and elevators on the right of way, and the commission is unable to render any service therein. There remains, however, the clear rule of the common law governing common carriers in all their relations to the public, that all shippers are entitled to equal and reasonable facilities, and prompt and safe transportation. Railways are public highways engaged in a public service, the companies obtain their franchise from the state and, in return, are placed under obligations to the public which they can neither abridge nor deny."

There is a great diversity of opinion on this question. The *Nebraska State Journal* says:

"The question of favoritism to elevator firms at stations on the various lines of railway in Nebraska has been a complicated one for years and is now before the Board of Transportation for some sort of adjustment in the shape of two or three test cases that have been made.

"It has been the custom of the roads to allow two and sometimes more elevators to be built on their right of way at all important stations, in which grain may be stored for shipment. The old 'shovel houses' have been abolished by the more modern plan of elevator machinery, and it has thus grown into a grievance among the farmers and shippers that after the railroad company has assigned sites to two or three elevators others who wish to compete cannot obtain similar privileges, and hence the business is a virtual monopoly.

"The railroad authorities claim that in giving sites for the building of a sufficient number of elevators at a station to handle the grain that is brought for shipment they have done their duty by the community, and that they ought not to be compelled to furnish land to build elevators for other competitors who would be superfluous and would merely make the business unprofitable to those who had first ventured their money in it.

"There is more or less reason on both sides. The granting of a site on the right of way by a road for an elevator gives the builder of that particular elevator an advantage over competitors who have to purchase their own sites farther away from the track. It is therefore of the nature of a monopoly.

"It ought to be a free competition, but after all it will be a hardship to order a railroad to furnish a site to every man or firm that chooses to build an elevator on it. The road may not have a convenient site to spare after giving one or two, and who is to be the judge? If it assigns a site to a new competitor that is unsatisfactory to him, what then?

"It would be a pretty hard rule to enforce that a road shall be obliged to give every applicant for elevator privileges a site that that will be satisfactory to him, because in a little while the entire available space about the depot may be occupied by private parties, and the road will have no land on which to put its own improvements. But if a company is ordered by the Board of Transportation under the law, if there be one covering the case, to give every man a site that wants one, and in compliance with that order it assigns a site that the man will not build an elevator on because it is too far away from the station, what then?

"There is then the alternative of ordering the roads to cease giving sites on their right of way to any private parties, and compelling all elevators to be built on outside land acquired by the owners. The question is, therefore, not the simple one that some people have evidently considered it from their individual standpoints."

Edward Kemble of Kemble & Hastings, flour and grain dealers of Boston, has filed with the Inter-State Commerce Commission a complaint against the Lake Shore & Michigan Southern Railway Company, the New York Central & Hudson River Railroad Company, and the Boston & Albany Railroad. The complaint alleges that shippers of grain and flour from Chicago to Buffalo are charged unjustly discriminating rates.

MARCH CROP REPORT.

The statistical report of the Department of Agriculture for March relates to the distribution and consumption of corn and wheat. It makes the proportion of the corn crop in the hands of growers 45.9 per cent., or 970,000,000 bushels, and of the wheat crop 31.9 per cent., or 156,000,000 bushels. The stock of corn on hand is the largest ever reported in March. The average of eight annual returns is 677,000,000 bushels; that of last year, 787,000,000 bushels. The estimated consumption to March 1 is 1,143,000,000 bushels, a figure exceeded only last year and in 1886. The proportion of merchantable corn of the crop of 1889 is 85.7 per cent., exceeded in recent years only by those of 1884 and 1886. The average value of all corn on Dec. 1 was 28.3 cents per bushel. The average on March 1 was 27.9 cents for merchantable and 19.2 for unmerchantable, making an aggregate value of \$35,000,000 less than the December estimate.

The wheat crop of 1889 was exceeded by the crops of 1880, 1882 and 1884. The average remainder in the hands of growers on the 1st of March for ten years has been 130,000,000 bushels. The average crop during this period is 450,000,000 bushels. The present returns are very full and satisfactory, the state agents' estimates agreeing very closely with those of the department consolidation. The result may be accepted with absolute confidence as an approximation as close as can be made by local estimates. Most of the wheat in farmers' hands is in states which have no surplus over consumption, or in those in which the larger portion is consumed at home.

Six spring wheat states have only 45,000,000 bushels, 18,000,000 of which will be required for seed and the remainder scarcely more than four months' consumption of their population. Ohio, Michigan, Indiana, Illinois, Missouri and Kansas, the only winter wheat states east of the Rocky Mountains contributing to commercial distribution, have only 60,000,000 bushels, half of which is needed at home, and part of the remainder commercially unavailable at the present prices. Therefore the available supply for exportation and home distribution to July is small. The depleted farm reserves have been measurably filled, except in a few states, but it will require the pressure of high prices to squeeze any considerable proportion of them into commercial distribution.

INDIAN WHEAT DRAWBACKS.

Believers in the Indian wheat bugaboo, says the *Milling World* of Buffalo, are having a good deal of labor to retain their faith in that unsubstantial phantom. English investigators, who have been studying the wheat question in India, are finding some apparently insurmountable difficulties in the way of the Asiatic farmers. 1. Their soil is worn out. 2. They have no fertilizers at hand, excepting bones and manure. 3. They cannot use the manure for fertilizing, as they are compelled to burn it for fuel, having nothing else to burn. 4. They cannot use bones as manure, being forbidden to do so by their moss covered religion. 5. Insect pests are numerous and overwhelming in the larger part of India. 6. These seasons are very capricious. 7. Every social, financial, commercial and religious condition is a check to development. The British investigators appear to be hopeless. Add to all these drawbacks the bad quality of even the best Indian wheat, the lack of transportation facilities and the inevitable 5 or 10 per cent. admixture of hair, wool, dung, dirt, gravel, sticks, straws and other superfluous and valueless Indian sweepings found in grain sent out from India, and it is easy to understand the sudden cessation of growth in the Indian wheat enterprise.

NOT CORN BUT MONEY.

The Topeka *Capital* doesn't think that the emergency rate will do the Kansas farmers much good, and suggests that elevators along the line of the railroads, in which the farmers can store their grain until prices advance, would afford more certain relief. The trouble about this scheme is that it isn't the corn but the money the Kansas farmer wants.—*Kansas City Times.*

The stocks of grain in Chicago elevators and afloat on Saturday evening, March 8, were 5,381,000 bushels of wheat, 4,270,183 bushels of corn, 1,632,767 bushels of oats, 854,914 bushels of rye, and 300,834 bushels of barley. Total, 12,439,767 bushels of all kinds of grain, against 13,840,851 bushels a year ago.

Points and Figures.

San Francisco received from Oregon and Washington in February 48,105 cents of wheat, and 24,385 cents of oats.

The stock of flaxseed in store in Chicago March 8, 1890, was, special bin, 6,934 bushels. No. 1, 270,109 bushels, against 309,100 bushels March 1, 1890.

One Chicago firm is said to be long 8,000,000 bushels of oats for May delivery.

It is reported that the Canadian Government will remove the duty on Indian corn. It is not easily produced in Canada, and the farmers must have it to feed their stock.

A seed wheat bill has been introduced in the Manitoba Legislature which provides that the government shall supply needy farmers with seed grain on the most liberal terms.

During the seven months ending Jan. 31 we exported 14,662 bushels of flaxseed valued at \$19,769. During the corresponding period of 1888-'89 there was no flaxseed exported.

Our exports of foreign merchandise for the seven months ending Jan. 31 included breadstuffs valued at \$121,312, against \$194,512 for the seven months ending Jan. 31, 1889.

George Kennan, the great Russian traveler, says he believes that if the great empire had American machinery and men, the wheat production would greatly exceed that of the United States.

The stock of grain in San Francisco warehouses March 1 was as follows: Wheat, 8,886 tons; barley, 20,944 tons; oats, 1,213 tons; corn, 541 tons. At Port Costa there were 69,551 tons of wheat.

The total stocks of wheat at three points on March 10 was as follows: Minneapolis, 9,351,202 bushels; St. Paul, 295,000; Duluth, 4,826,503. Total, 14,472,705 bushels; decrease for the week, 4,744 bushels.

The shipments of corn from Philadelphia in February were 3,009,000 bushels, being the greatest amount ever shipped in that month, and close to the best record made in a month—3,316,000 bushels in January, 1880.

There were 1,633,070 cents of wheat exported by sea from California in February, against 576,090 in February, 1889; 9,964 cents of barley, against 33,969 in February, 1889; and 1,502 cents of oats, against 3,008 in 1889.

Secretary Garrard of the State Board of Agriculture says there is no reason to believe that the growing crop of winter wheat has been materially injured by cold weather. The condition of the crop is as well advanced as it usually is an average year by the 1st of April. Had wheat begun to joint out, the severe weather of the last few days would have been fraught with serious results, but as it is it only prompts the blade to hug the earth instead of growing.

A correspondent writing from Crookston to *Farm, Stock and Home*, says: "The open market plan has had something of a test in this section this year. Some Duluth parties who want our wheat put two men on this market, and have kept them here during the past wheat-buying season. They have examined the wheat, and put their price upon it, and in every case the wheat they bought netted the farmer from 4 to 25 cents more per bushel than the elevators would pay."

The Judiciary Committee of the House of Representatives has ordered a favorable report on the bill creating a court of patent appeals. The bill provides for five judges. If passed, as it should be, this court will be the court of final appeal for all cases relating to patents. It would greatly relieve the Supreme Court, which now has much more work than it can attend to. As this court would have nothing to do with other than patent cases, it would surely be more likely to render justice in all cases.

It has been discovered that cats can be put to a new use. However, they must be killed first. An English exchange of recent date says: "Another sale of mummy cats took place on Monday at Liverpool, where Messrs. Gordon & Co. offered in their salesroom a consignment of nine tons of embalmed cats, mostly in fragments, from the Beni-Hassan pit. The sale attracted a large company of merchants and brokers. The bones were first sold, and were purchased for £5 17s. 6d. per ton by Messrs. Leventon & Co., who are the holders of the first cargo imported from

the same place, for fertilizing purposes. Heads were separately offered, and for these there was some competition, and the prices ranged from 1s. 9d. to 4s. 6d. For one specimen, consisting of the entire body without the head of an embalmed cat, 5s. 61. was obtained, and some bones fetched as much as 3s. each."

According to the report of the secretary of the Chicago Board of Trade, the visible supply of grain in the United States and Canada on Saturday, March 8, was 28,314,149 bushels of wheat, 14,517,349 bushels of corn, 4,858,920 bushels of oats, 1,567,638 bushels of rye, and 1,658,821 bushels of barley. These figures are smaller than the corresponding ones a week ago by 682,224 in wheat, and larger by 71,676 in corn. The visible supply of wheat for the corresponding week a year ago decreased 225,690 bushels.

The annual report of the Peoria Board of Trade for 1889 shows that there was a decrease of 351,907 bushels in the receipts of wheat, an increase of 4,718,540 bushels of corn, a decrease of 3,576,080 bushels of oats, a decrease of 164,925 bushels of rye, and an increase of 347,035 bushels of barley. The total receipts are 27,501,615 bushels, a gain of 972,663 bushels over 1888. As will be noted, the chief increase has been in corn, which seems a natural result of increased local consumption, a crop of exceptional magnitude, and favorable freight rates to the seaboard.

The seed wheat and feed convention was held at Huron, S. Dak., March 5. It was estimated that the twenty counties will need 536,700 bushels of wheat, 263,400 bushels of oats, 97,657 bushels of flax, 76,000 bushels of barley, 215,700 bushels of corn, 15,000 bushels of millet, and that about \$570,000 will be required to buy grain. Of this amount three fourths can be raised by the counties benefited, the remainder to be secured from outside contributions. A commission to have full charge of soliciting and arranging for grain, and to act with a commission appointed by the Governor, was named.

Prof. D. N. Harper of Minnesota, in a recent report, draws these conclusions about frozen wheat: "A vast difference as to their seed value exists between the various kinds of poor wheat. Rusted wheat and blistered (frosted) wheat, if well cleaned, are safe to use for seed; frozen wheat, which is utterly worthless for milling, is likewise of no value for seed. It cannot produce a good crop. The more thoroughly the wheat is cleaned, the better the seed resulting, and the better the crop, particularly in yield. No wheat should be seeded that has not been tested as regards its gluten and percentage of germination."

CERTIFIED BILLS OF LADING.

Thomas L. Greene writes as follows in the *Railway and Corporation Law Journal* on the certification of bills of lading as a safeguard of commerce:

"The legal and commercial world must settle down to the conviction that the bill of lading of a common carrier in its present form is not conclusive evidence that any such shipment has really been made. Under the several decisions of the Supreme Court there seems no longer any doubt. An agent of a railroad who signs receipts or bills of lading for grain or cotton which the carrier has never had in his possession exceeds his authority, and does not consequently bind his principal. There is an undertone of uneasiness throughout the trading community under this state of things. Under our modern conditions probably nine-tenths of the cotton and grain forwarded from the interior to the seaboard, whether for home consumption or export, are moved under bills of lading upon which the purchase money has been advanced, and which are presumed to pass the title to the property. Banks, commission houses, mills and merchants, all must rely upon the good faith which has heretofore been based upon the value represented by these evidences of title. If, now, a gigantic fraud may be perpetrated at any time upon banks and merchants because no one can tell whether bills of lading regularly drawn and duly signed are valid or not, our whole commercial system is in danger of confusion.

"Shall we by legislation make bills of lading signed by an authorized agent conclusive evidence against a carrier? If we do so we offend justice. By a conspiracy agents could in one day sign and negotiate a number of bills of lading to such an amount as to bankrupt any railroad. Fraud should here as everywhere be a defense against the fulfillment of a contract. Again, the railroad cannot discriminate between persons, but must do business with

all alike, though a banker is allowed to give due weight to character in accepting bills of lading as security for advances. If, then, we cannot insist upon the theory of making bills of lading good under all circumstances, is there not yet a partial remedy? It is the boast of the law in all enlightened countries that it advances as the needs of commerce may require. No doubt in this case also some help will in time reach us.

"Meanwhile, it might be possible to secure absolute confidence in bills of lading as passing title to actual property in transit by a system of certification. Let some officer of a railroad be designated to whom could be submitted such bills of lading, and such only as the holder wished to be certain about. After a reasonable time for examination, such officer should certify over his signature to the correctness of the document in question, which should then be binding upon the corporation in the same manner as a certified check upon a bank. As such a plan would require several days, during which the bill of lading could not be used at banks for obtaining advances by the shipper, it would arouse remonstrance from those with limited capital; but the certification would add certainty to transactions which now are uncertain, and might lead to further steps for relieving our great and growing commerce from a danger which now constantly threatens it."

CORN MARKETS ARE NEEDED.

It was remarked by one recently who was familiar with the old countries that they used very little canned fruit, as it was American, and prejudice attached to it. Whatever there may be in that, it is singular that they are so slow to be convinced that Indian corn is one of the most wholesome and palatable, as well as economical, articles of food. When they come over here and become a part of the population, they soon acquire the local and rational habit in regard to it. They learn to like cornmeal, and readily make it a prominent food element in the various methods of preparing it. The masses in European countries need cheap food, and corn is superior to the stuffs they so largely use. There ought to be some more extended and systematic efforts to diffuse the great American cereal among them. Culinary artists from the adopted citizens might perhaps aid by going back to the old lands and exhibiting the most palatable forms of food made from it. This country is in great need of new markets for its vast production, and the United States Government should take advantage of every opportunity offered to overcome the European prejudice against corn as human food.

THE EMERGENCY RATE.

As will be seen from the following verses taken from the *Nebraska State Journal* the demand for an emergency rate on corn has led to a demand for an emergency rate on corn juice:

"Our laws must be lame,
Or some one to blame,
When a bushel of corn
Buys one drink for 'the same.'"

If it isn't too late,
I wish here to state
The times now demand
An "emergency rate."

It will strengthen the use,
And will make times more loose,
To have an emergency
Rate on juice.

The Chicago Freight Bureau has decided to try to bring the lake freight lines under the Inter-State Commerce Law, and to keep the trunk lines closer to the lines of exact justice to shippers.

A story is told of a San Francisco bank teller who injured the cornea of his eye and went to Italy, where a doctor successfully grafted a chicken's cornea in his eye. The teller was quite elated at the success of the operation, claimed that he saw perfectly well, and upon his return resumed his position in the bank. He had only been at his desk three days when a wheat man from Porta Costa came in to draw out some money. He had just been down to the Board of Trade rooms, and carried in his hand a sample of wheat which he had been tasting. When his money was counted out to him he carelessly dropped a few grains of wheat on the counter, when to his great surprise the teller jumped upon his stool, and flapping his arms in true chicken style commenced to peck away at the wheat, which he swallowed with evident satisfaction.

ELEVATOR AND GRAIN NEWS

A rice mill will be built at Brunswick, Ga.
Holly Springs, Miss., has a new broom factory.
A cotton-seed oil mill is talked of at Easley, N. C.
Perry, S. C., may soon have a new cotton-seed oil mill.
W. H. Taylor of Lancaster, Ky., has built a distillery.
A cotton-seed oil mill is contemplated at Carrollton, Ga.

A large cotton-seed oil mill will be built at Greensboro, Ga.
It is said that a broom factory is to be built at Roanoke, Va.

Columbus, Neb., will probably have a hemp tow mill soon.

Several mammoth elevators will be erected at Fairport, Ohio.

The new elevator at Panola, Ill., has commenced operation.

Covington, Ga., will probably have a new cotton-seed oil mill.

J. B. Daniels, grain dealer at Great Bend, Kan., has sold out.

A. Koch & Bro. will establish a brewery at Williamsport, Pa.

Several large grain warehouses are projected in Windward, Mich.

Terrell, Tex., will probably have a new cotton-seed oil mill soon.

L. P. Vander Velde has sold his grain elevator at Martin, Mich.

The Farmers' Alliance have built an elevator at Perkins, Iowa.

There are prospects for a new cotton-seed oil mill at Harlem, Ga.

The new elevator at Arrowsmith, Ill., is doing a thriving business.

A cotton seed oil mill will probably be erected at Dardanelle, Ark.

Two farmers near Oxford, Kan., have built an elevator in that town.

Charles Theis' estate, Philadelphia, Pa., will erect a new brewery.

Elizabeth Vollmer of Philadelphia, Pa., will build a new brewery.

There are several new elevators soon to be erected at Seattle, Wash.

W. M. Vastine of Hastings, Neb., has sold out his grain business.

The Mobile & Ohio Railroad will erect a grain elevator at Mobile, Ala.

The Omaha (Neb.) elevators handled 9,400,000 bushels of grain in 1889.

Weatherford, Tex., will probably have a new grain elevator this spring.

J. M. Rushin and others will erect a cotton-seed oil mill at Boston, Ga.

W. T. McElvain & Co. of Brainard, Neb., have dissolved partnership.

Gates & Veasey of New Iberia, La., will enlarge their cotton-seed oil mill.

A company has been formed at Monroe, La., to build a cotton-seed oil mill.

The Gibbs Linseed Oil Mill at Green Island, N. Y., has resumed operations.

Faber & Son of Kansas City, Mo., grain dealers, have dissolved partnership.

Frazier Bros., grain dealers at Peterson, Iowa, have dissolved partnership.

Shearer & Stockebrand, grain dealers at Grand Meadow, Minn., are very busy.

The Farmers' Alliance intend erecting a cotton-seed oil mill at Bamberg, S. C.

The Nokesville Distilling Company of Nokesville, Va., has been incorporated.

An elevator will be built at St. James, Minn., by the farmers in the vicinity.

Christian Blon & Son of Owatonna, Minn., will build a brewery at that place.

The suit of O to Anderson against the Union Elevator Company of Minneapolis for \$19,000 damages on account

of injuries received while in their employ was decided in favor of the company.

The brewery of the Union Brewing Company, Denver, Colo., has been enlarged.

There are 240,000 bushels of corn cribbed at Dorchester, Neb., awaiting shipment.

Van Patten & Frisbee Bros. have sold out their grain business at Sheldon, Iowa.

A company has been organized to build a cotton-seed oil mill at Cartersville, Ga.

E. B. Lewis and others talk of building a cotton-seed oil mill at Montezuma, Ga.

G. G. Weeks & Son of Knoxville, Ill., dealers in grain, have dissolved partnership.

The Palmetto Brewing Company, Charleston, S. C., will enlarge their brewery.

Campbell Bros., grain dealers at San Antonio, Tex., have dissolved partnership.

A broom factory will be started soon at Eureka Springs, Ark., by A. W. Blackford.

John Hohenadel, Philadelphia, Pa., intends building an addition to his brewery.

A \$25,000 distillery is to be erected at Shelbyville, Tenn., by a stock company.

The Farmers' Alliance of Gadsden, Ala., is preparing to erect a cotton-seed oil mill.

The firm of Drake & Dodge, grain dealers at Manchester, N. H., has been dissolved.

The Fort Gaines Alliance of Fort Gaines, Ga., think of building a cotton-seed oil mill.

John F. Harris & Co. have commenced work on a large grain elevator at Lincoln, Neb.

Arnhold & Schaeffer Brewing Company, Philadelphia, Pa., will enlarge their brewery.

A \$40,000 starch factory is to be put up at Grand Rapids, Mich., by a stock company.

The Western Brewing Company of Belleville, Ill., intend purchasing new machinery.

J. H. Knox & Co. of Corsicana, Tex., think of erecting a grain elevator at that place.

The Old Lexington Distillery Company of Newport, Ky., will erect a \$50,000 distillery.

Dan Seever of Parkersburg, W. Va., thinks of establishing a broom factory in that city.

Both the elevators at Verdon, Neb., are full of grain, and no cars can be secured to move it.

The New York Central Railroad Company will build a new grain warehouse at Buffalo, N. Y.

L. C. & E. E. Girtton have succeeded E. E. Girtton in the grain business at Lake View, Iowa.

The firm of Cash, Bird & Co., dealers in grain, feed, etc., at Atlanta, Ga., has been dissolved.

Tecumseh, Neb., wants a starch factory that will consume about 600 bushels of corn per day.

The Madison Brewing Company of Madison, Ind., intend building an addition to their brewery.

E. A. Spink & Co. of Washington, Ind., think of building an elevator in connection with their mill.

The Imperial Mill Company of Duluth, Minn., will build an elevator of 300,000 bushels' capacity.

The Farmers' Alliance at Elmwood, Neb., intend building an elevator there if they can secure a site.

There are 100,000 bushels of corn and 50,000 bushels of oats in storage at Duncombe Station, Iowa.

Elder, McKinney & Applegate, grain commission merchants of Chicago, have dissolved partnership.

D. S. Brockway of Greensborough, Md., will build a grain elevator with a capacity of 8,000 bushels.

The Alamosa Milling and Elevator Company of Alamosa, Colo., have filed articles of incorporation.

Taylor Bros. & Hall of Athens, Ga., have commenced work on an elevator and grist mill at Macon, Ga.

The Excelsior Manufacturing Company of Washington, Ga., intend putting in a cotton-seed oil mill.

A couple of large elevators will be built at Windsor, Ont., by the Canadian Pacific Railroad Company.

A. T. Schmid and others of Little Rock, Ark., propose to erect a cotton-seed oil mill at Weatherford, Tex.

Augustus Tompkins of Charlotte, N. C., and others, will erect a cotton seed oil mill at Edgefield, N. C.

The Chattahoochee Brick Company of Atlanta, Ga., will probably build a broom factory at Bolton, Ga.

Hunting & Co. of Rose Creek, Minn., have opened their new grain house, and find business very brisk.

The Saline County, Mo., farmers have complained that the elevator men do not inspect their grain properly.

The starch factories of Gilbert & Sleeper at Des Moines, Iowa, have been sold to an English syndicate.

The trial of S. F. Sherman, in the elevator shortage case, will take place at Buffalo, N. Y., March 17. His

counsel has made every effort to put it off to the next term, although Sherman professes to be anxious for trial.

Gill & Forrest, whose elevator and mill were burned at Hillsboro, N. Dak., will probably locate at Duluth, Minn.

Articles of incorporation have been filed by the Empire Brewery of Buffalo, N. Y. The capital stock is \$200,000.

The Gutsch Brewing Company of Sheboygan, Wis., has filed articles of incorporation. Capital stock, \$150,000.

Johnson & Freeman, grain and lumber dealers at Emmetsburg, Iowa, have been succeeded by F. Freeman & Co.

The grain business in Manitoba is not very lively at present, and many of the country elevators have been closed.

The elevator at Heyworth, Ill., is so full of grain that no more can be received, and no cars can be secured to ship it.

H. O. Hambaugh & Co. of Peacher's Mills, Tenn., intend building a 30,000-bushel elevator at that place this spring.

Walter S. Barton, who has conducted a grocery and grain business at Malone, Iowa, has disposed of his grocery.

A. D. Ricketts of Fisher, Ill., has made extensive repairs in his elevator at that place, adding several new machines.

The elevators at Atchison, Kan., have about 50,000 bushels of wheat stored, and they continue to buy large quantities.

A grain elevator and flouring mill will be built by the Farmers' Alliance and the Federation of Labor of Logan county, Ky.

Thomas Connelly of Chicago, has purchased the Harrison Elevator at Burlington, Iowa. The consideration was \$30,000.

The new elevator of the Monte Vista Milling Company of Monte Vista, Colo., is finished. It has a capacity of 50,000 bushels.

The elevator and mill to be built at Gallatin, Tenn., will cost \$30,000. The capacity of the elevator is to be 10,000 bushels.

The grain firm of J. F. Harris & Co. at Lincoln, Neb., has been changed, and the name of the firm is Harris, Woodman & Co.

A new linseed oil mill will soon be in operation at Chicago. The company has been organized with a capital stock of \$500,000.

N. F. Walker, G. B. Dean and J. W. Woffold have formed a stock company to build a cotton-seed oil mill at Spartansburg, S. C.

In addition to the proposed enlargement of the Fowler Elevator at Omaha, Neb., a new elevator of mammoth capacity will be built.

The Farmers' Mutual Exchange Association has been organized at Lane, Ill., to deal in grain, seeds, etc. The capital stock is \$3,000.

H. M. Cook has leased the elevator at Buckingham, Ill., to Wm. Baxter, who will buy grain for W. P. Harvey & Co. of Chicago.

New Brighton, Minn., has a new grain elevator of 50,000 bushels' capacity. It is operated by the City Elevator Company of Minneapolis.

Edward Taylor was arrested and tried at Baltimore, Md., for stealing wheat from the B. & O. Railroad. He was sentenced to four months in jail.

A 500,000-bushel elevator will probably be built at New Orleans, La., by the Queen & Crescent route, whose headquarters are at Cincinnati, Ohio.

The Baltimore Elevator Company will probably build an elevator of larger capacity, to replace the one recently burned at Canton, near Baltimore, Md.

The firm of Meis & Drilling, grain dealers at Templeton, Iowa, has been dissolved. The business is now carried on under the name of C. Meis & Co.

The American Cotton-Seed Oil Company has filed articles of incorporation at Trenton, N. J., increasing its capital stock from \$20,000,000 to \$30,000,000.

Brackett & Stoddard, grain dealers at Marshalltown, Iowa, have asked for a receiver. They are indebted to Chicago commission houses to the extent of \$26,000.

The Wills warehouse at Black Dog, Ore., lost 3,000 bushels of wheat, and the Sullivan warehouse at the same place 10,000 bushels, by high water sweeping it into the river.

The Quebec Board of Trade has petitioned the Government to build grain elevators at Quebec, in anticipation of the excellent shipping facilities afforded by the new harbor.

F. Woodruff & Co., a prominent grain warehouse firm of New York City, has failed. Franklin Woodruff has been in the grain storage business for many years with different New York capitalists. The present firm—Franklin Woodruff and Frank W. Farnham, both of Brooklyn—was formed in 1883, and was thought to have unlimited capital behind it. The assignment was made to Edward

A. Hobbs, with preferences for \$37,100. Mr. Woodruff also made individual preferences for \$26,300. The storage property was valued at \$1,100,000 on which was a mortgage for \$450,000.

The elevators at Elmwood, Neb., having a capacity of 14,000 bushels, are full of corn, and there are about 2,000 bushels in bins, that cannot be shipped until more cars can be obtained.

The City Elevator at Buffalo, N. Y., owned by the New York Central Railroad Company, is to be enlarged, and when completed will have a capacity of 800,000 bushels. Elevator "B" of the same company will be torn down.

The option on the elevator of Angus Smith at Milwaukee, Wis., has been extended, and it is said that the English syndicate will surely purchase the property. The amount is somewhat less than was originally asked, being \$685,000.

The Chicago & Northwestern Granaries Company (Limited) of London, Eng., declare their intention of putting up new elevators on new lines of railroad which may be built in the country tributary to their recently purchased elevators.

The Joseph Kuntz Braving Company of New York City has been incorporated with a capital of \$460,000. The incorporators are Joseph Kuntz, Jos. A. Kuntz, Louis J. Porr, Frank Durwanger, Phillip Bunn and Frederick Dassori.

The Geneva Grain and Elevator Company of Geneva, Neb., has filed articles of incorporation with a capital stock of \$20,000. The incorporators are John A. Dempster, J. Jensen, V. C. Shickley, George C. Clark, George W. Smith, J. G. James, W. H. Cooms, J. S. Small and E. J. Stone.

Chief Deputy Grain Inspector Fulton is authority for the statement that the recent large receipts of corn over the St. Paul & Duluth are the beginning of a consignment of half a million bushels. The greater part of it is received from the Minneapolis & St. Louis. It goes into the Sawyer elevators.—*Duluth News*.

An action to recover \$1,500 has been brought against G. A. Archer by the Board of Trade of Yankton, Dak., for non-fulfillment of contract. A bonus was given Mr. Archer to erect a linseed oil mill, with the understanding that it would be operated for five years. After two years the mill burned, and has never been rebuilt.

Lewis Tudor & Co. bought the 500,000 bushels of grain lost overboard when Elevator No. 3 at Baltimore, Md., burned, for \$550. They afterward sold 60,000 bushels of it to a New York firm for \$1,200. A small portion of the remainder has been sold for 10 cents a bushel. Elevator men seldom realize the full value of grain damaged by fire.

The Pennsylvania Seed Company has been swindling the farmers in the vicinity of Buffalo, N. Y. Their plan is to sell some grain; then the agent guarantees to buy a large amount of the crop raised at very high prices and obtains a note from the farmer. The same old story. Farmers should patronize elevator men who are interested in their getting good seed.

The Cargill Elevator Company of Minneapolis has filed articles of incorporation. The incorporators are William W. Cargill and Joseph Clarke of La Crosse, Wis., and Samuel D. Cargill, James F. Cargill and Calvin D. Bissell of Minneapolis. The amount of indebtedness is limited to \$1,500,000. The directors are William W. Cargill, Samuel D. Cargill and James F. Cargill.

The Northern Central Railway have determined to build a new elevator at an early date to be under lease to the Baltimore Elevator Company, and it is reported that all the preliminary arrangements have been completed, and it only remains to decide upon the size. A 2,000,000 bushel house is what is wanted by the trade, with at least four ship legs arranged most conveniently for the unloading of bay craft. There is a mild movement on foot at Annapolis to urge the state to erect an elevator for handling grain shipped here from points on the Chesapeake Bay and its tributaries.—*Baltimore Journal of Commerce*.

RIVAL CORN EXPORTERS.

The exports of corn from this crop, says the Minneapolis *Market Record*, are quite remarkable for the large amounts that have gone out this year. The exports are not alone large from the United States, but are also from the Argentine Republic. The amount of corn now on passage is considerably larger than a year ago. That on passage to the United Kingdom alone amounts to near 5,000,000 bushels, against but little more than half as much a year ago. Rather more than two-thirds of it went from this country, about a quarter from the Argentine Republic, and the remainder from the Black Sea. Exports the previous year from the Argentine Republic, which are now second only to the United States, were nothing. That country is coming rapidly forward as an exporter of cereals, and promises speedy rivalry to this country in the supplying of the importing countries of Europe. It is our national rivals that lower the prices of our breadstuffs through competition in supplying other's wants, rather than home speculators.

Brokers should keep sober. A bull is entitled to only two horns daily, and a bear to none at all.—*Boston Gazette*.

LAW AND LITIGANTS.

Promissory Note—Material Alteration.

The insertion of the following memorandum over signatures of the makers of a promissory note, "Privilege of extension for three days given," was held a material alteration of the note by the Supreme Court of Minnesota in the case of Flannigan vs. Phelps et al.

Futures—Note—Consideration.

The question was raised in the case of Snoddy vs. American National Bank, recently decided by the Supreme Court of Tennessee, whether the bank, which was an innocent holder of a note given in settlement of a loss sustained while dealing in futures, could recover of the maker. It appeared that in the dealings referred to there was no intent to take or deliver grain pretended to be purchased on one hand or sold on the other. The court held that the bank could not recover. The court said that the general rule that as between an innocent holder and the maker the consideration of a note cannot be inquired into was subject to the exception that if the consideration was a gaming, or an usurious one, it could be inquired into.

Not Responsible for Shortages.

The Erie Railway Company was defeated in Justice McKay's court at Cleveland a few days ago, in a suit brought by James Corrigan and others for \$217, deducted on a claim of shortage from the freight on a cargo of corn carried from Duluth to Buffalo. The railway company now proposes to take the case to a higher court. The cargo was carried under a bill of lading which contained a clause making the owner of the vessel responsible for shortage. The freight bill was \$2,217, and the Erie paid but \$2,000. The question of shortage charges has never been decided in an Ohio court, but has been decided in New York and Michigan in favor of the vessel. Three similar cases have been decided in New York in favor of the vessel owner, while Judge Wallace of the United States Court of the northern district of New York on one occasion favored the consignee. Judge Brown of the United States Court of the eastern district of Michigan has decided in favor of the vessel owner, and ruled that such a clause in the bill of lading is not binding on the owner.

Bill of Lading—Fire Clause.

In a suit recently brought to recover for cotton delivered by a railroad company, but destroyed by fire in transit, it appeared that the bill of lading under which the shipment was made contained what is known as a fire clause, stipulating that the company should not be liable for loss or damage by fire, and the company sought exemption from liability through this clause. The court found, however, that the agent who received the goods for shipment was not furnished with a form of bill of lading imposing the full responsibility of a common carrier under the rules of the common law, that he had no authority to receive the goods for shipment with such responsibility attaching to the company, that he submitted no alternative to the plaintiffs, and that no consideration for the fire clause passed to the shipper. Under the circumstances the Supreme Court of Tennessee held (Louisville & Nashville Railroad Company vs. Gilbert) that the stipulation in question was invalid and afforded the company no exemption whatever. The court said: "There was no reciprocal concession of legal rights by carrier and shipper. It is shown that there is no corresponding reduction in freight charges, but that the rate charged under the bill of lading in this case is the same that was charged before the insertion of the fire clause. That the shipping public at Columbia have acquiesced in this form of the bill of lading for years without complaint will not justify the limitation, since the company had not been ready all the while to carry goods with or without the fire clause, and had not given its customers a fair opportunity of electing for themselves which they would take."

Dealing in Futures Not Gambling.

In the suit of A. M. Wright & Co., commission men of the Chicago Board of Trade, against Henry Curtis, a retired lumberman, for \$5,000 for commissions and money expended on account of Curtis' deals on the Board of Trade prior to March, 1888, the jury brought in a verdict for the full amount claimed.

Curtis commenced in October, 1887, to speculate on the Board through A. M. Wright & Co. and an employee named Bennett. At first Curtis was successful and made some encouraging profits, but in March, 1888, there was a considerable balance on the wrong side of his account. He declined to pay and A. M. Wright & Co. brought suit. Mr. Curtis filed a bill in the Circuit Court to restrain A. M. Wright & Co. from prosecuting their suit, and the case was heard at length by Judge Fuley. The chancellor decided that the court could not interfere with the case in any way, as the entire matter was based on a gambling transaction. The bill was dismissed and the original action stood.

The defense was that the whole deal was a gambling transaction, and therefore Wright & Co. could not collect. It was not the old argument that options and "puts" and "calls" were gambling transactions, but that every deal

where margins only are placed comes under the head. In his opening argument Mr. Barnum argued that A. M. Wright & Co. and Curtis could not have raised sufficient money on their combined property to have purchased the 20,000,000 bushels of grain that were traded in in a few days. There was no intention, he claimed, of ever paying for the grain bought, or delivering that sold. It was merely a bet on the rise or fall of the market. However, the jury decided otherwise.

Fires, Casualties, Etc.

Gerke's brewery at Cincinnati was damaged by fire and water Feb. 18. Loss \$1,000.

The brewery of Fred Koehler at Erie, Pa., was damaged by fire to the extent of \$400 Feb. 7.

J. G. Rogers, senior member of the firm of J. G. Rogers & Co., grain dealers at Lowell, Mass., is dead.

The elevator of the Smith & Haldeman Elevator Company at Toledo, Ohio, has been destroyed by fire.

Grafflin & Son, grain commission men at Logansport, Ind., were burned out on the morning of March 5.

A large grain store at Baltimore, Md., was recently destroyed by fire. Loss, \$15,000; insurance unknown.

The distillery of W. H. Harris at Louisville, Ky., burned Feb. 25. The loss is \$15,000; covered by insurance.

The Mier Grain Elevator at Pocatong, Ill., was recently destroyed by fire. The loss is \$9,000; insurance unknown.

The brewery of John P. Hastings at New Cassel, Wis., was destroyed by fire recently. The loss was \$6,000; insurance \$3,000.

Lamoureux's grain, seed and produce house at Grand Rapids, Mich., was burned Feb. 12. The loss was \$32,000; insurance \$18,000.

On Feb. 7 the Billings Brewery at Billings, Mont., was burned to the ground. Loss \$20,000; little insurance. The fire was of incendiary origin.

Burglars entered the office of the Nye Wilson Morehouse Elevator Company at Davy, Neb., and blew open the safe, but found nothing of value.

The grain elevator of F. M. Slazles & Co at Ireton, Iowa, was totally destroyed by fire. The elevator was valued at \$7,000, and insured for \$3,000.

An elevator located on a branch of the Hastings & Dakota Railroad, belonging to Hodges & Hyde of La Crosse, Wis., burned recently. The loss was covered by insurance.

The old Kern Brewery of Allentown, Pa., owned and operated by Christian Franklin of Easton, Pa., was totally destroyed by fire March 5. The loss was \$6,000; insurance unknown.

A boiler in the large distillery of J. B. Lanier at Salisbury, N. C. exploded on the night of Feb. 21, killing two men and fatally injuring several others. The distillery was blown to pieces.

The elevator and mill of the North Dakota Roller Mill Company at Hillsboro, N. Dak., burned March 2. The elevator had a capacity of 40,000 bushels. The loss is \$100,000; insurance unknown.

The brewery of the Peter Breidt Brewery Company at Elizabeth, N. J., was set on fire by an electric wire March 1. The main building and machinery were entirely consumed. The loss is \$25,000; covered by insurance.

The grain elevator of Cottrell, Alden & Co. at Cordova, Neb., was destroyed by fire Feb. 28, together with all its contents, including a carload of wheat and corn which had been collected for the Dakota sufferers. The loss is about \$6,000; insurance \$2,000.

The large elevator and mill owned by R. M. Pratt & Co. at Champlin, Minn., were destroyed by fire Feb. 19. The property was valued at \$20,000 and was a total loss; the insurance amounts to about \$10,000. The fire was thought to be of incendiary origin.

Col. John Lane Hancock, one of the oldest and best known citizens of Chicago, died of pneumonia Feb. 17. Col. Hancock was born at Buxton, Me., in 1812, and was therefore 75 years of age. He came to Chicago in 1854, was a prominent member of the Board of Trade and was twice elected president of that corporation. His whole life was one of activity and self-denial, and his death will be deeply deplored by many to whom he had lent a helping hand. His business career was one of great success, and he leaves his wife and eight children in very comfortable circumstances.

Owing to the great scarcity of seed grain throughout Minnesota and Dakota, the Great Northern Railway line announces a reduction of 50 per cent. in their rates on seed grain during the month of April.

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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MARCH 15, 1890.

PHILADELPHIA'S GRAIN BUSINESS.

It is said that the elevator companies at Philadelphia are making a reduction of $\frac{3}{4}$ of one cent per bushel in grain storage charges. Philadelphia has an excellent opportunity at present to regain all of her lost grain trade, and also secure part of what would naturally go to New York and Baltimore. New York is slowly but surely driving the grain trade of the winter months away from that port by exorbitant charges for wharfage, storage, transferring, and by low grading in and high grading out. Since "Elevator No. 3" at Baltimore was burned, the grain trade at that port has been blockaded, because the remaining elevators are unable to take care of all the grain arriving there. Thus Philadelphia, with her fair inspection, low storage rates, and ample facilities for handling grain, has an advantage over her competitors. That shippers, and especially exporters, have become convinced that Philadelphia offers superior advantages for handling grain cannot be denied; for during February more corn was shipped from that port than ever before in that month, and almost as much as in any preceding month.

SILVER AND GRAIN.

Many schemes have been proposed of late to solve the silver problem, but as yet none have been adopted. Secretary Windom claims that the passage of his bill, which provides for the issuing of certificates against bullion deposited in the United States treasury, would result in a steady and rapid advance in the price of silver, while free coinage would reduce the price of silver below what it is at present.

The price of silver should, in the interest of our export trade, be advanced to what it was before we demonetized silver, then would the advantage which India and Russia have over other exporting countries be at an end. Despite the fact that the price of silver has materially declined since the demonetization of silver by the United States, Great Britain and Germany in Russia and India, where they have a single standard, and that is silver, the moneys still retain the same value in domestic exchange as formerly, but in foreign exchange they are at a discount.

The merchants who export grain, cotton and

other commodities from these two countries pay the producers a much higher price for these commodities than is justified by the market price at the point to which they ship. But they pay for the commodities with money which they procured at a discount, and are thus enabled to pay more than grain is worth. The sooner this advantage which the grain and cotton growers of India and Russia have over those of the United States is removed, the better it will be for our export grain trade and for the entire country.

If the passage of Secretary Windom's bill will advance the price of silver to its former price, and we think it will, let it be passed, and the sooner it is passed the better it will be.

A GREAT SCHEME.

It was Col. Mulberry Sellers who evolved the great scheme of buying all the corn in the country, then buying all the hogs, and finally, as the master stroke, to feed said corn to said hogs, and raise pork and prices simultaneously. A Chicago genius has organized the Farmers' Co-operative Brotherhood with the modest capital of \$50,000,000, and his proposed plan of operation is quite as simple as that of Col. Sellers. The capital stock is in one million shares at \$50 per share. No one is allowed to take more than one share, and we may add, one share will probably be sufficient to satisfy the most exacting.

The object of the concern, as stated by the presiding genius, is "to enable the farmers to say what price they shall get for their products." Very simple and easy. He proposes to accomplish this by using a bagatelle of twenty-five or fifty million dollars to buy up the grain of farmers and holding it until the market comes to their figures. He intends to crowd out the speculators by using the capital of the Farmers' Brotherhood to corner the market by purchasing and withholding from market all the grain offered for sale.

We violate no confidence when we say that this scheme, like all other plans for defeating the laws of supply and demand, will not work. A much simpler and more efficacious method would be not to raise any grain for a year or so. That would determine the value of artificial means for stimulating the markets. Another plan would be to burn half of each crop. That would also bring experience—and knowledge. Another plan that might be fraught with teaching, would be to kill half the farmers—preferably the half that don't belong to the Brotherhood; that would put an end to the raising of "scab" grain by non-union farmers. Any of these plans are quite as feasible as that of the Brotherhood, and will be adopted about as soon. The farmer's good sense may be relied upon to keep out of visionary schemes for defeating natural laws. He knows a heap more than the demagogue gives him credit for.

STATE INSPECTION AT BALTIMORE.

State inspection of grain is desired by some of the grain dealers at Baltimore, and an effort is being made to have the Maryland Legislature create a commission for that purpose. The directors of the Baltimore Corn and Flour Exchange, however, are strongly opposed to the proposed change, and at a recent meeting adopted resolutions strongly condemning the action of members of the Exchange who are endeavoring to secure legislation creating a state board of commissioners for the inspection of grain, to be appointed by the governor.

If Baltimore was to secure state inspection of grain, that port would undoubtedly have a material advantage over other Atlantic ports. Western shippers have more confidence in state inspection than in that controlled by commercial exchanges. It matters not whether it is as just, as reliable, as honest as that controlled by boards of trade, they will always prefer to ship to a point where their grain will be graded by state inspectors. They cannot help but feel that their grain is more likely to be honestly inspected by disinterested parties than by inspectors in the employ of the purchasers of their grain.

It would also advance the interests of Balti-

more's export grain trade. Foreign buyers would have more confidence in state inspection for the same reason that the Western shipper would have more confidence in state inspection than he has in the present inspection at Baltimore.

A Baltimore correspondent of an exchange says "the idea of turning our grain inspection bureau over to the control of the state is too preposterous to consider, as that is about the only source of revenue the Exchange has left." It is greatly to the interest of our export grain trade, to the interest of all grain dealers and the grain producers that our grain should be handled as cheaply as possible. The idea of charging enough in excess of the actual cost of inspecting grain to support a commercial exchange is also too preposterous to be favorably considered for a minute by any unprejudiced grain dealer who has witnessed the decline of profits in handling grain, and the rise of the grain export trade of foreign countries during the last few years. If Baltimore wishes to retain her export grain trade her dealers must wake up and keep pace with the times.

CHICAGO STORAGE RATES.

Storage rates on grain in the public elevators at Chicago will be advanced July 1, or at least the public elevator companies have advertised to advance the rates on that date to one cent for the first ten days, and three-eighths of one cent for each succeeding ten days. As Milwaukee and St. Louis will advance rates to the same figure, Western shippers will naturally ship to points farther east. The Chicago receivers are aware of this fact, and propose to make an effort to get the railroad companies to furnish free storage for grain for the first few days, instead of allowing their tracks to become blocked with loaded cars. We know of nothing else the receivers could do that would more greatly facilitate the trade, and be more influential in increasing the grain trade of Chicago. Western shippers would have time enough to sell their grain at a fair price after it had arrived at Chicago, and there would not be a demurrage charge constantly hanging over their grain, warning them to sell. Cars would not be so scarce as they are at present as none would be delayed, and shipments could be made to and from Chicago in much less time than at present.

CONTRACT GRADES AT NEW YORK.

The grain commission merchants of New York are making a strong effort to increase the wheat trade of that city, and a meeting was called recently to consider the advisability of making a grade of hard winter wheat, and of amending the rules so as to allow its delivery on sales of contract wheat, and also of amending the rules so as to allow the delivery of No. 1 Northern spring wheat on sales of contract wheat.

The change was strongly supported by a number of receivers, who urged the amending of the rules as proposed, on the ground that it would broaden the market materially by increasing the supply of contract wheat, and thereby greatly lessen the chances of a corner. The meeting was a very exciting one, and nothing definite was accomplished, but a committee was appointed to confer with the Grain Committee of the Exchange, and report at a future meeting.

New York's wheat trade has been light of late years, and it is necessary to take some action in hope of restoring it. If the proposed amendments are made, as they should be, country grain dealers who handle hard winter wheat and Northern spring wheat will be able to sell against their holdings on the New York Produce Exchange, and a number of them will undoubtedly do this, and then ship their holdings to New York to fill their contracts.

The Illinois Grain Merchants' Association made an effort several months ago to have the grade of contract wheat made wider at Chicago, so that they would be safe in selling against their holdings, but the Board of Trade obstinately opposed any change, and consequently much of the grain

that would have been marketed at Chicago has gone to other points. Grades should not be made in the interest of speculators who are ever trying to corner the market.

Other circumstances being equal, that market in which the greatest number of country shippers can hedge against their holdings will receive the greatest amount of grain. But a number of other changes must be made at New York before that port will be acceptable to Western shippers. The inspection of grain must be put in charge of the state. Inspectors must not only be honest, reliable and fair, but they must be above the suspicion of being otherwise. Outrageous shortages are entirely too frequent, the wharfage, lighterage, storage and transfer charges are exorbitant.

All this must be changed, or New York will lose the export grain trade, for unless the disadvantages under which it has been carried on the last few years are removed, foreign grain-exporting countries will supply consumers, and we will have no export grain trade.

THE LINSON ELEVATOR BILL.

It is said that the grain elevator men of New York and vicinity, and we suppose of Buffalo also, have agreed to stop business if the Linson Elevator Bill becomes a law. This bill provides for the establishment of four floating elevators to be run by the state with a fixed charge of one-quarter of a cent per bushel for transferring. It is claimed that \$28,000,000 are invested in stationary and floating elevators, and that this capital would be virtually sunk if the Linson Bill becomes a law.

Undoubtedly there is some truth in what is alleged; but the stoppage of their business would not be from despair, but to precipitate matters to a crisis. The four "floaters" operated by the state could not begin to take care of the business, and a blockade would result. The Linson Bill is in the nature of retaliation for the non-observance of the McEvoy Law. While all such laws are to be deprecated on general principles, the elevator men, on the other hand, have invited restrictive laws.

GOVERNMENT "WAREHOUSES."

Mr. Windom's silver scheme has been "seen" and gone several better by a number of plans which have been incorporated in bills before the present Congress. One of these asks for an appropriation of \$50,000,000. The purpose of this appropriation is to establish a system of government warehouses, called in the bill "sub-treasuries." This sub-treasury is to be established in every county which demands it with 100 petitioners, and where \$100,000 worth of farm produce is raised. The location is to be decided by a vote of the people. The manager is to be elected by the people every two years, and give a bond to carry out the duties of his office. The government is to build warehouses for the storage of all kinds of grain, tobacco, cotton and produce. The farmer having this produce may take it to the sub-treasury and store it, receiving treasury notes for 80 per cent. of the value of the product at a price fixed by the Secretary of the Treasury, based upon the price current in the leading markets of the United States. A warehouse receipt must be given for the grain or other products, showing the amount deposited and the amount of treasury notes advanced on the product—these notes to be legal tender. The interest on the money advanced shall be 1 per cent. per annum. The manager must classify and grade all products. Orders may be given by one sub-treasury for the delivery of the amount of product stored there from some other sub-treasury. Nothing is said about the cost of transportation, though provision is made to discharge all interest that may have accrued against the advance of money made on the deposit of produce and all insurance, warehouse and other charges that attach to the product for warehousing and handling. Should a man receive a receipt for wheat in South Dakota he could come to some sub-treasury on the seaboard, and demand his

grain. There would under this act be a fixed price for grain all over the United States. It would command as high a price in Minnesota as New York. The difference in price would allow the depositor to get his 80 per cent. in notes, and allow the government to do what it chose with the grain, although the bill provides for the sale of unredeemed products at auction to pay the amount advanced.

There you have it in a nutshell. It is said that the farmers of Georgia are so enamored with the scheme that they intend to make it an issue at the state election.

THE CHICAGO BOARD'S QUOTATIONS.

The courts of Illinois have virtually decided that the Chicago Board of Trade cannot lawfully withhold its quotations from bucket shops. This is the outcome of an eight years' fight to control what common sense would indicate was its own property. The learned judges, however, have decided that the bucket shops have a right to reap where they have not sown. As a result the Chicago Board has decided to discontinue its quotation department after March 31. For the first time in the history of the fight they propose to act on the defensive. There is no telling what judges may do; but it hardly seems possible that even a Chicago judge can be so bull-headed as to decide that the Board must continue to collect and disseminate quotations. Time will prove whether the move is a wise one. At any rate the price of membership in the Board took a jump once the decision of the directory was made. Unquestionably there has been a decline in speculation all over the country. The bucket shops have not got all that the regular exchanges have lost; but the drawing of the line between the two was enough to strengthen the price of memberships in the Chicago Board. The bucket shop will always enjoy a certain patronage, no matter whether it has quotations or not; but it will certainly lose some of its clientele as soon as market quotations are discontinued.

GRAIN EXPORTS.

The monthly report of the Bureau of Statistics for February shows that during the month we exported breadstuffs valued at \$14,639,608 against \$8,293,765 for February, 1889, and for the first two months of the year we exported breadstuffs valued at \$26,197,228, against \$19,126,989 for the same period of 1889. For the first eight months of the present crop year we exported breadstuffs valued at \$94,847,578, against \$82,108,465 for the first eight months of the crop year of 1888-'89.

The wheat exports for the month were 4,800,450 bushels, valued at \$3,865,325, against 1,583,629 bushels, valued at \$1,392,645 for February, 1889. During the eight months ending Feb. 28 we exported 37,071,445 bushels of wheat, against 33,705,970 bushels for the same period of the preceding year.

The corn exports for the month were nearly double those of February, 1888, being 13,421,111 bushels, against 7,570,384 bushels. During the eight months ending with February we exported 55,442,078 bushels, valued at \$23,562,287, against 38,706,983 bushels, valued at \$19,303,654 for the same period of 1888-'89.

During the month 119,908 bushels of barley were exported, against 54,250 bushels the preceding February, and for the eight months ending February 28, 1,093,794 bushels were exported, against 1,310,492 bushels for the same period of the preceding crop year.

Of oats 1,285,278 bushels were exported during the month, and 4,662,455 bushels during the eight months ending with February, against 33,957, and 462,973 bushels respectively for the corresponding periods of the preceding crop year.

During the month 77,350 bushels of rye were exported, against 1,470 bushels for February, 1889, and during the eight months ending with February we exported 998,735 bushels, against

108,809 bushels for the same period of 1888-89.

Especially worthy of notice is the increase in the exports of corn, rye and oats. Most of the rye and oats was exported from New York, very little going by way of the other seaports. The corn exports of New York for the eight months ending with February was slightly in excess of the corn exports for the same period of the preceding crop year, but the corn exports for the month showed a decrease, while at Philadelphia and Baltimore there was a remarkable increase, both places exporting more than New York did. The exorbitant charges, the poor facilities and unreliable inspection at New York seem to more than overbalance the advantage of great outward tonnage.

GRANTING ELEVATOR SITES.

For some time the Nebraska Board of Transportation has been doing everything in its power to compel railroad companies to grant sites for the erection of grain elevators, but without avail. The Minnesota Railroad Commissioners complain because they have not the power to grant sites for elevators along the lines of railroad, and North Dakota has just passed a law providing for the erection of public warehouses on the right of way of railroad companies and prescribing condemnation proceedings.

The Nebraska railroads claim that the elevators already erected at the desired points are able to take care of the business, and they object to giving away any more of their land. They also desire to protect those who have already invested their money in elevator buildings from cut-throat competition which occurs in most every line of business when the supply exceeds the demand.

Railroads should not be allowed to discriminate between shippers of grain or other commodities, but because they have tried to foster the grain trade at stations on their line by giving ground for the erection of one or two elevators, which they deem enough to handle the trade, it does not follow that they should be compelled to give a site to every one who may desire to erect an elevator. Railroads have rights as well as individuals. If they do not consider it advisable to grant a site, that should end it, but the one who desires to erect an elevator should buy land near by, and it should be provided that the railroad company should build a track to the elevator at the expense of the elevator man.

The North Dakota law provides that the railroad companies shall rent or sell sites at convenient places near stations for public elevators. The Elmwood (Neb.) elevator case has been taken into the courts, and we doubt that the farmers will be able to compel the company to give them a site. If the farmers win they will soon build a number of elevators in that state, and will not do themselves or any one else any good.

E. S. RICHARDS, who recently sued the Lake Shore & Michigan Southern Railway Company for \$2,500,000 for breach of contract was given a verdict by the jury for \$75,000. The suit was brought by Richards for damages caused by the company's refusal to carry out a contract which went into effect Jan. 2, 1884. According to contract, Richards erected a transfer house at Englewood, Ill., and fitted it up with hopper scales, with the expectation that for ten years all grain from Western roads to the Lake Shore would be transferred through his house. The railroad was not to make any use of weights supplied by Richards except for billing purposes. Richards expected to derive his profits from the sale of his weights to owners of grain and Western roads. He claimed that the railroad transferred a large amount of grain on the tracks without permitting him to weigh it, and at the end of two years treated these breaches as an abandonment of the contract. Some time ago he recovered \$10,000 for the actual damage suffered during the two years. The verdict recently rendered in Mr. Richards' favor was for the prospective earnings during the remaining years of the contract.

Editorial Mention.

THE Iowa Railroad Commissioners will probably revise the tariff schedule in that state, for the purpose of meeting the reduction in inter-state rates.

CORN in some parts of Illinois that was cribbed early is found to be in bad condition, the cob being soft, and the heart of the grain next to it black and moldy.

SIoux CITY, Iowa, proposes to erect an immense corn palace at the World's Fair in Chicago in 1892, to cost over \$100,000. Corn should also be cooked in all the different ways, and served to foreigners gratis.

MERCHANT & Co. of Philadelphia have sent us a unique brass quill as a souvenir of "Merchant's Guaranteed Roofing Plates." It makes an excellent letter opener and at the same time reminds us that Messrs. Merchant & Co. do nothing by halves.

A BILL has been introduced in Congress putting binding twine and the raw material, jute, sisal grass, manilla, and ramie on the free list. The measure levies a duty of 30 cents per bushel on barley, 40 cents on barley malt, and \$4 per ton on hay.

Now that Englishmen have invested large sums of money in American elevators and mills, will the English Government and English merchants continue to expend large sums of money in other lands, in hope of becoming independent of American grain?

THE Committee on Commerce of the House of Representatives has shown itself to be decidedly opposed to the repeal of the Inter-State Commerce Law by ordering that all bills with that end in view be reported back to the House with the recommendation that they lie on the table.

AS WILL be seen from the new advertisement in this issue, the Heidenreich Company of this city have succeeded to the business of E. Lee Heidenreich & Co., engineers and builders of grain elevators. The cleaning house portrayed on page 223 of this issue is a fine specimen of their capabilities in this line.

OR late we have received a number of letters from our readers seeking information, and we have concluded to open a department for "Queries and Replies," which we beg our readers to make use of whenever they wish any information relating to the trade, or can give an inquiring brother the desired information.

WE have received a beautiful framed lithograph of the new elevator and warehouse of Johnson & Comstock, extensive grain handlers of Binghamton, N. Y. The picture in itself and the elevator and warehouse which it portrays have a look of prosperity, which goes to show that the firm is composed of live, pushing men.

AN effort is being made in New York to enforce the law passed last year against "bucket shopping." Recently the police arrested a number of bucket-shop keepers, and a test case will be made upon one of the arrests. If the state is able to convict in this case the law will be strictly enforced. The law makes it a misdemeanor for any one to keep a place for making wagers, or bets made to depend upon any lot, chance or contingent event, or upon the future price of commodities or property of any description whatever. A law is seldom passed that has not loop-holes large

enough for law-breakers to creep through if they earnestly desire to do. In this case the prize to be secured by the bucket-shop keepers is such a precious one that they will undoubtedly fight the law as long as possible.

G. W. CRANE, G. T. Honstrin and J. H. Tromhauser have formed a copartnership under the style of The Crane Company. Their general business is the building and equipment of elevators, which their experience enables them to do in a satisfactory manner. Their office is 900 South Fourth St., Minneapolis.

THE Cambridge Roofing Company of Cambridge, Ohio, have issued a neat and tasteful catalogue of their roofing, siding, etc., which not only contains the matter usual in such catalogues, but also abounds in valuable hints on the subject of encasing buildings in steel and iron. It will be sent gratis to those who will apply for it.

A NEW YORK paper in commenting upon the losses in grain elevators, during the past year, suggests that "fire underwriters should investigate this matter and endeavor to reduce the grain elevator losses." We would also suggest that while they are investigating they look into the matter of grain insurance, which is sadly in need of a number of changes and a reduction in rates.

H. W. CALDWELL & SON of this city deserve credit for one of the finest catalogues we have seen for many a day. To our way of thinking, it is just what a catalogue of useful appliances should be. It is not "gorgeous," and is not dull. It is arranged for use, handsomely printed on excellent paper, and is a credit to the good taste of the excellent firm which issues it. It will be sent on application to those who desire a copy.

GRAIN men will notice, under the appropriate head, the card of C. H. Thayer & Co., 54 Magazine St., New Orleans. This firm is the only one of export brokers in New Orleans, selling to exporters there and elsewhere and also to foreign importers, receiving cable bids daily. They have this season done a remarkable business in corn, selling to the trade in St. Louis, Chicago, New York, Philadelphia and Baltimore, having connections at each of these places.

FOR some time the Montreal Board of Trade has been urging the Dominion Government to adopt a permanent policy in regard to the tolls to be charged on grain passing through the canals for Montreal. The custom has been to fix the tolls at the opening of the season of navigation, but this gives the tolls such a degree of uncertainty, that all grain loaded before the season opens, as much of it is, is billed to other points. The Government should make the canals free for all time.

WE give elsewhere a part of the address of the chairman made recently at the meeting of the foreign stockholders of the Chicago & Northwest Granaries Company, which shows what the company proposes to do. It will exchange salt, coal, seed and other necessities for the farmers' grain, and without competition. It will buy grain, store it, and sell it for future delivery. It will do a mixing business. In fact, the company proposes to take advantage of every opportunity to make a profit.

THE Chicago grain receivers have become aware of the fact that it is decidedly against their interests to have public warehousemen dealing in grain stored in their own houses. At a recent meeting of the Grain Receivers' Association a resolution was adopted favoring an amendment to the rules of the Chicago Board of Trade providing that "the proprietors or managers of warehouses shall be in unquestioned good financial standing and credit, and shall not be interested directly or indirectly, either themselves or through or with any employe or other person, in the pur-

chase or sale, or in the ownership of any grain in warehouses so owned or controlled by them." This is a move in the right direction, but the Board has not yet made it one of its rules. Until it is made a rule, and strictly enforced, the receivers should not cease for a minute to agitate the question.

How to supply the farmers with seed wheat is a question that has been worrying the North Dakota Legislature for some time. The promoters of the lottery scheme offered to relieve them of this responsibility by giving the needy farmers 250,000 bushels of seed wheat, if the state would grant the lottery a charter, for which the promoters agreed to pay \$60,000 and an annual tax of \$150,000. But the bill was killed, and rightfully, too. Swindlers should not be licensed to rob citizens for the sake of seed wheat or any other wheat.

THE Illinois State Board of Agriculture recently published a report to show that the farmers of the state lost \$10,000,000 on the corn crop of 1889. Such a report, directly opposite to what we reasonably expect, and to what all sensible persons connected with the producing and handling of it, believe, should not be sent out without an exposition of its unworthiness is sent with it. The report is so wild, so utterly improbable, that even the farmers' journals are unwilling to accept it. If the State Board cannot send out reliable reports they had better decline to send out any, or else give way to abler men.

FREE feed and oats for seed is what the Manitoba farmers want. Last season their oat crop was almost a complete failure, and they are paying a duty of 10 cents per bushel on American oats. A great many municipal and other organizations have held special meetings to discuss the question, and have petitioned the Dominion Government to admit these articles free of duty, at least temporarily. The farmers must import their oats for seed or plant oats of poor quality. Without good seed they cannot raise good oats, and unless they have a good crop this year Manitoba will have to import more than ever.

IOWA shippers have applied to the Railroad Commission to know whether or not it is discrimination for railroads to charge demurrage at one station, and not at another. This is surely discrimination in the full sense of the word, and we doubt if the commission can find ground for deciding otherwise. If they decide in the affirmative, a number of suits will be brought against the railroads for the recovery of demurrage paid. Iowa grain shippers have become tired of being imposed upon by the railroads, and in the cases they have recently taken into the courts they have every prospect of winning.

ANOTHER scheme to help the poor, dependent farmer, has come to light. A Dakota gentleman is urging Congress to relieve the farmers by paying them a bounty of 15 cents per bushel for all wheat exported from this country. This would be a great boon to the wheat exporters and the foreign consumers. For the farmers would sell their wheat to the wheat exporters at 5 to 10 cents per bushel less than to any one else, and thus the wheat exporters could sell to the foreigners cheaper than any one else. It would also be necessary to pay a price above that justified by the price in foreign markets in order to keep enough wheat to supply the home demand.

THE English farmers are raising a strong cry against the English sparrow. An agricultural journal published at London gives an account of a recent meeting of farmers at which "The Sparrow Pest" was discussed, and it was shown that the damage to wheat alone in one county was nearly \$90,000 per year, and over \$10,000,000 in the entire country. One farmer claimed that the loss to the country was not less than \$25,000,000. The sparrows destroy great quantities of early white oats and other cereals as well as wheat. If

these beautiful, clean, peaceful, unobtrusive little pets which an American gentleman so kindly imported a few years ago are able to destroy \$25,000,000 worth of grain in their mother country, why will they not destroy the entire American grain crop in a few years? The sparrow must be destroyed or he will drive away our domestic birds and destroy our grain.

It is reported that the representative of an English syndicate has recently spent some time in North Dakota looking over the line of elevators owned by A. S. Brooks & Co., and have been given an option on the company's elevators. The line consists of thirty elevators, and the price asked is said to be \$1,000,000. If the English are anxious to buy something with their surplus cash why don't they buy what we are anxious to sell, then they could buy at a fair price. We have immense quantities of grain to sell.

AND still the terminal elevators are deducting from receipts to allow for future shrinkage, instead of deducting from the grain certificates, when canceled, for shrinkage that has already occurred. Why country shippers will thus permit themselves to be robbed, is a puzzling question. Grain is frequently ground up months before it has shrunk one-tenth of the amount deducted from the country dealers' shipment to allow for future shrinkage. The terminal shrinkage steal is one of the greatest afflictions borne by the American grain trade of to-day. It is an outrageous injustice which should not be tolerated for a moment.

If public warehousemen are permitted to deal in grain stored in their own houses, why will they not make false reports of stocks on hand when it is to their advantage to have the market go down or up? Why will they be such "chumps" as to mix the best and the poorest of each grade in the same bin and not save the best for canceling their own certificates, and thus realize more than the market price for grain which they purchased at the market price? It is decidedly against the interest of all other dealers to permit public elevator men to deal in grain in their own houses, and it should be stopped. If outsiders were alive to their own business welfare they would have stopped it long ago.

THE Montreal Corn Exchange has recently secured a change in the matter of storage rates at that place, which will undoubtedly prove advantageous to the Montreal dealers, and to outside dealers shipping grain to that place. The storage charges in force heretofore have been entirely too high, and the system of track delivering has caused the railroad companies so much inconvenience that the storage rates have been reduced. Hereafter all grain consigned to members of the Corn Exchange will be placed in store within 48 hours from arrival, unless previously delivered, and the storage rates will be one-half of one cent per bushel for the first ten days, and one-fourth of one cent per bushel for every ten days thereafter. If the railroads find it inconvenient to allow grain to remain in the cars a few days after arrival, let them furnish free storage for the first five or seven days, the same as they do for merchandise.

BUFFALO'S new car service association has been doing such excellent work that everybody but the railroads have been dissatisfied. One of its rules provided that only 48 hours should be allowed after the arrival of goods for unloading. Notice of arrival was seldom given before noon of the first day, and the railroad companies claimed it was not their duty to report arrivals. They probably expect receivers to stand in the yards and watch for cars consigned to them. It is said that in some instances they did not report arrivals until demurrage was due, and then had the cheek to charge demurrage. This was frequently paid under protest, but one grain receiver refused to pay the demurrage charge when demurrage was claimed at the time the arrival was reported,

and up to last reports the car was still standing on track unloaded. To charge another man for one's own delay in such a case is robbery. The feeling against the railroads was very strong, and law suits were threatened. At last reports a strong effort was being made to have the time for unloading extended to three full days after the day upon which the arrival is reported.

THE president of the Nebraska Farmers' Alliance is credited with making the following statement: "No man can raise grain and ship it 500 miles at a profit. The best market for farm products is usually close at hand, and the best policy is that which plants factories in the midst of farms." He does not accuse the elevator men, the grain dealers or the railroad companies with stealing the profit, but he simply says it cannot be made. The farmers no more than any other class of producers, can reasonably expect to produce four or five times as much of a commodity as is possible for the consumers to consume, and sell it at a profit as fast as the railroads can haul it to market. The nearer the producer and consumer are together the greater will be the mutual advantage. It would be better for the Nebraska grain grower to have the consumers within his state. Yet if the farmers will not produce in excess of the demand they can ship their products more than 500 miles and sell at a profit.

DOTS AND DASHES.

We exported 8,454,429 bushels of corn during January against 9,842,171 bushels for January, 1889.

Chicago shipped 7,383,148 bushels of oats during the first two months of this year, against 8,821,725 bushels for the same time of 1889.

Large numbers of Arkansas hogs are being shipped into Kansas to consume the cheap corn of which the farmers have such a vast surplus.

Bert Stoner, the settling clerk said to have cheated his employer, B. P. Hutchinson, the Chicago speculator, out of some thousands of dollars, has returned to work in Mr. Hutchinson's office.

The San Francisco *Commercial Herald* says one cause of weakness in wheat is given as the approach of the tax levy in March, which makes people not desirous of being holders at that time.

It is rather early to be at it, but the experts and statisticians have already destroyed the winter wheat crop. And in fact there is some ground for alarm; but a month or six weeks from now will be a better time to frame a prophecy.

"Insurance men," says the *Milling World* of Buffalo, "are paying more and more attention to their risks on grain elevators." Can it be that the insurance companies wish to cancel the policies held by owners of idle elevators at Buffalo?

It is reported that about all the marketable oats of Missouri have been sold and shipped. Large quantities in every county were unfit for shipment. Some of the farmers have held their oats, expecting not to sow any this spring.

An Iowa exchange says: "A Pierson girl fed two of her fingers into a corn sheller." This is heartrending. To think that it is necessary to feed corn shellers anything but good corn, and that, too, in the greatest corn-growing state of the Union.

During the month of January we exported broom corn valued at \$9,257, against \$6,903 for January, 1889, and for the seven months ending Jan. 31 we exported broom corn valued at \$69,879, against \$96,870 for the seven months ending Jan. 31, 1889.

We exported 111,933 bushels of barley valued at \$61,469 during the month of January, against 26,026 bushels valued at \$11,354 for January, 1889, and during the seven months ending Jan. 31 we exported 973,886 bushels valued at \$546,781, against 1,256,242 bushels valued at \$765,446 for the seven months ending Jan. 31, 1889.

An English firm has secured a consignment of several thousand mummified cats from Egyptian tombs, for the purpose of selling them for fertilizing wheat fields. We will wager our last summer's hat that before the year has gone by several enterprising Americans will have raised a crop of wheat which will sing the famous night song of

Thomas. Of course he will use mummy wheat for seed, and mummified cats for fertilizing the ground.

It appears that Mr. Pillsbury of Minneapolis is not so dead set against dealing in futures as he seemed to be. While glaring with one fierce eye at options in wheat, he is winking alluringly with the other at an option on the senatorship.—*Chicago Inter-Ocean*.

It is stated in authoritative quarters that the Canadian Government will increase the duty on imported flour from 50 cents to 75 cents per barrel. This will undoubtedly cause a decrease in the imports of American wheat flour and an increase in the imports of wheat.

During the month of January we exported breadstuffs valued at \$11,558,674, against \$10,833,224 for January, 1889, and the value of the breadstuffs exported during the seven months ending Jan. 31 was \$80,208,024, against \$73,814,700 for the seven months ending Jan. 31, 1889.

The Board of Trade of Minneapolis has entered a protest against the reduction of the duty on flax fiber, as some of the millers there think of manufacturing it. Several replies have been received from representatives and senators declaring their intention of opposing this reduction.

H. S. Hoxie of Holloway, Mich., is the raiser of a new buckwheat called Japanese, for which he asserts a greater yield, more pounds to the bushel, less seed to the acre, better bread, and milder ferocity of scratching than any buckwheat yet invented. It is claimed to be absolutely non-Bohemian.

C. J. Murphy, who was in charge of the corn food exhibit at the Paris International Exposition, writes that the prospects for a successful corn exhibit at Edinburgh and Vienna are excellent. The American State Department will do all in its power to aid the corn exhibit at the agricultural exposition to be held at Vienna in May.

E. L. Harper, who was sent to the Ohio state penitentiary in 1887 on a ten years' sentence, has been recommended for pardon. He was vice-president of the Fidelity National Bank of Columbus, Ohio, and lost the money of that concern dealing in wheat at Chicago. His friends believe that President Harrison will grant an unconditional pardon soon.

During the seven months ending Jan. 31 we exported seeds valued at \$1,414,850, against \$2,933,305 for the seven months ending Jan. 31, 1889. The seeds exported during the seven months ending Jan. 31 included 13,990,203 pounds of clover seed, 3,724,060 pounds of cotton seed, and 5,360,395 pounds of timothy, against 27,349,213, 3,410,592 and 5,083,871 pounds respectively for the seven months ending Jan. 31, 1889.

A special meeting of the general managers of the Central Traffic Association lines and the propeller lines running from Buffalo to the Northwest, was held at Chicago Feb. 26. The purpose of the meeting was to reduce the differential between the lake and rail rates. The railway companies feel that the differential allowed by the lake lines is too large, and furthermore that they are allowed to change their rates too often.

Nearly everybody will rejoice to hear that "Old Hutch" has been robbed. It should be doubly galling to this old pirate to be fleeced by a mere clerk, after having plucked the entire Chicago Board of Trade.—*Louisville Commercial*.

Let the Chicago Board of Trade pluck the beam of wholesale grain gambling from its own eye, and it may see more clearly how to remove the mote of retail grain gambling from the optic of the bucket shops.—*Pittsburg Dispatch*.

"Old Hutch" of Chicago has lost about \$40,000 through the shrewd operations of two of his clerks. There is great glee when "Old Hutch" scores a loss, and it lasts until he makes up his losses by squeezing some of the laughers.—*Kansas City Journal*.

The reported squeeze of "Old Hutch" for twenty-five to forty thousand dollars will be a crumb of consolation to his numerous victims in these parts. The force of bad example extended to his employees. Two of them are now feasting on "bear" meat in Canada.—*Omaha Bee*.

"Old Hutch," it appears, is not entirely invulnerable. He has been robbed by one of his clerks of a sum ranging between \$25,000 and \$40,000. To be "pinched" in a wheat deal is "strictly business," but to be robbed by an insignificant \$10 per week settling clerk, shades of Ceres, Pomona and the goddess of pork ribs, whoever she is! This is financial murder of the innocents.—*Pioneer Press*.



C. W. Ball has been appointed chief grain inspector at Buffalo, N. Y.

Wm. Thurston has been reappointed secretary of the Merchants' Exchange of Buffalo, N. Y.

R. H. Stringfellow has retired from the grain firm of H. C. France & Co. of Rose Hill, Iowa.

Mr. J. S. Smith has been reappointed weighmaster by the Merchants' Exchange of Buffalo, N. Y.

C. A. Bloomer has been elected president of the Exchange Elevator Company of Buffalo, N. Y.

O. P. Carter, a prominent grain dealer of Minneapolis, has returned from a prolonged visit in Europe.

John McLeod, president of the Duluth Board of Trade, has gone to Scotland for a three-mon. trip.

W. Martin of Martin, Mitchell & Co., proprietors of the line of elevators on the N. P. & Manitoba Railroad, has gone to Europe.

John Gougar, formerly superintendent of the elevator at Shadeland, Ind., has moved to Lafayette, Ind., and embarked in other business.

William Baxter is now buying grain at Buckingham, Ill., for W. P. Harvey & Co. of Chicago. He has leased the elevator of H. M. Cook at Buckingham.

W. R. Wilson of Fremont, Neb., has retired from business. He was a member of the Nye-Wilson, Morehouse Company that operate many elevators throughout the state of Nebraska.

J. R. Creighton, a grain dealer of Bloomfield, Iowa, has invented a machine for weighing grain as it comes from the threshers and elevators. The machine has a capacity of from 5,000 to 15,000 bushels per hour.

Edward Roelky, chief grain inspector of the Corn and Flour Exchange of Baltimore, Md., has been reelected. Mr. Roelky has been in poor health for some time, and has been given a six-months' vacation, with full pay.

J. B. Anxer, for a number of years superintendent of machinery for the Northern Pacific Elevator Company at Fargo, N. D., has accepted a similar position with G. W. Crane, manufacturer of grain elevator machinery, Minneapolis, Minn.

W. Baer, formerly of Minneapolis, Minn., has moved to Boston, Mass., having been elected World's Secretary of the United Society of Christian Endeavor. While in Minneapolis he was associated with the grain firm of G. W. Van Duzen & Co.

EUROPE'S TRADE IN INDIAN CORN.

The enormous production in and heavily increased export of Indian corn from the United States renders of interest the following outline of the trade in and production of that cereal in Europe, taken from the London *Mark Lane Express*. The British imports of Indian corn for the last dozen years have been as follows, in quarters of eight bushels each:

Quarters.	Quarters.
1878..... 9,713,980	1884..... 5,782,108
1879..... 8,434,622	1885..... 7,356,238
1880..... 8,685,771	1886..... 7,236,032
1881..... 7,812,197	1887..... 7,272,376
1882..... 4,264,300	1888..... 5,919,705
1883..... 7,405,791	1889..... 8,447,383

"These figures," says the journal named, "reveal a steady demand capable of taking 4,000,000 quarters of maize annually, without consideration of price. We have bought 4,264,300 quarters of corn when we have had to pay 10 shillings (worth 24 1-3 cents each in United States money) per quarter more money for it than we are at present paying. Turning to what is the best importation of a cheap and abundant year, we find that it is 5,500,000 above the minimum, and that 5,500,000 may accordingly be assumed as the quantity of corn entering into direct competition with other feeding stuffs. The United States, as we have already seen, is by far the greatest producer and shipper of corn, but the grain is one which can be grown to advantage in all countries between the 20th and 40th parallels of north and south latitudes. Russia is not a large grower of corn, but as very little is used at home the dominions of the Czar often figure in the list of heavy shipping countries to an important extent. Almost 11,000,000 acres in Southern Russia are devoted to the growth of corn, and the yield varies from 12,000,000 to 24,000,000 bushels.

"Italy is a soil peculiarly fitted for the growth of corn, but here, where the return to the acre is satisfactory, and the total grown is considerable, a good home demand comes in and prevents the sale of corn to foreign powers proving large. Italy, however, is a country which a good price for corn at Mark Lane may always tempt into liberal shipments. The yield varies from 70,000,000 to 80,000,000 bushels, and the acreage from 4,000,000 to 5,000,000. The average yield is 17 to 18 bushels to the acre.

"France grows corn on about 1,000,000 acres in the

southern departments, and the yield is 20 to 24 bushels to the acre. Home requirements absorb the entire quantity produced. Austria has nearly 1,000,000 acres under corn, and the yield varies considerably, from 15 to 20 bushels to the acre. Hungary, which is on the whole a hotter climate than Austria, cultivates 4,500,000 acres of corn, and in a good year reckons to obtain 90,000,000 bushels therefrom. The round, small, compact corn grown in Hungary is much esteemed in England. Other countries growing corn are the Argentine Republic, Spain, Turkey and Roumania. The first and last of these countries are increasing their exports. Spain uses what corn she grows within her own frontiers. Turkey is only a fitful exporter.

"The countries sending corn to the United Kingdom have attained the following maximum of shipment:

	Cwts.
Argentine Republic, 1888.....	2,204,280
Bulgaria, 1888.....	404,648
Egypt, 1882.....	484,560
Morocco, 1885.....	538,733
Roumania, 1887.....	11,065,640
Russia, 1888.....	3,832,132
Turkey, 1878.....	2,748,378

"The British market is at present paying about 1 guinea per quarter for Russian, Turkey and Roumanian corn; about 1 sovereign for American and African, and about 19 shillings for Argentine. The last named is not so much intrinsically inferior as depreciated in value by the want of care and cleanliness in shipments."

During 1889 the United States exported 81,278,006 bushels of corn, over half of which went to Great Britain and Ireland. In 1888 we exported 33,773,756 bushels of corn, in 1881 we exported 82,296,486 bushels, and in 1880 we exported more corn than for any year before or since, the amount being 89,190,944 bushels.

WINTER WHEAT DAMAGED.

Reports from the different sections of the winter wheat states say that the recent cold weather has had a damaging effect on the crop. The wheat in Northern Indiana was injured some, the tops being frozen, although the roots may be safe. In Northern and Central Ohio and Central Missouri the condition is about the same. The extent of the injury cannot be ascertained until fine weather comes. In Central and Southern Illinois there is much anxiety, as it is certain that some of the wheat has been killed. Tennessee and Kentucky report winter wheat badly damaged. In Michigan and Southern Indiana the wheat is in fair condition, and no reports of winter killing have been heard from Kansas. In the Province of Ontario complaints have been made that the crop has been growing more or less during the winter, and the wheat has been raised out of the ground by freezing and thawing. This has injured it more than is generally supposed.

A COMMISSION MAN GETS INSURED.

A prominent member of the Board of Trade recently had his life insured. One of our men happened to be in the outer office and overheard the following conversation:

Agent—Name in full?
Member of Board—My name when full is ———.
Agent—Married or unmarried, Mr ———?
M. of B. (with a sigh)—Married—very much married.
Agent—Your maiden name?
M. of B.—I never had one.
Agent—I mean your wife's maiden name?
M. of B. (after thinking a long time)—I really forget but I think it was Schneider.
Agent—Do you drink, Mr. ———?
M. of B. (covering his nose)—Very little.
Agent—Do you smoke?
M. of B.—Occasionally.
Agent—Cigars or tobacco?
M. of B.—It depends on the market.
Agent—Do you attend the theater?
M. of B. (blushing)—I have been to see the dizzy blondes once or twice.
Agent—With a free pass?
M. of B.—No sir, it was a complimentary. Board of Trade men are allowed these on account of the bar business.
Agent—State what disease you have had and how much?
M. of B.—Mumps, once in early infancy; epizootic twice, but very slightly. The headache is my worst enemy. It generally affects me when I a ryes.
Agent—Do you spit blood?
M. of B.—No, sir; I spit tobacco.
Agent—Plug or fine-cut?
M. of B.—It all depends which my friend has.
Agent—How many full brothers have you?
M. of B.—Three, all full, as a rule.
Agent—How many more full brothers are you likely to have?
M. of B.—My mother is dead, and my father intends to remain single.
Agent—Sensible man. What is your principal failing?
M. of B.—Puts and Calls.
Agent—What are Puts and Calls?
M. of B.—You call for other people's money, and put it away.
Agent—Name a particular friend?
M. of B.—I cannot.

Agent—Merely a form, that's all.

M. of B.—D. D. Spencer.

Agent—Where were you born?

M. of B.—In a bed.

Agent—I mean in what town?

M. of B.—In the town of Oshkosh.

Agent—Have you ever been attended by a physician?

M. of B.—Often.

Agent—Have you paid him?

M. of B.—I gave him my note.

Agent—Do you expect to travel?

M. of B.—I trust I shall not have occasion, but times are hard. Wheat is undecided.

A STORY OF OLD HUTCH.

"You have probably observed in your travels," said the hotel clerk, "the sign hung out at the cashier's desk in all the leading hotels, 'No money loaned or checks cashed here!' Those signs are hung out to protect the hotel from dead beats, and they serve the purpose to a certain extent.

We made a mistake now and then, as was the case here a couple of weeks ago. An old codger came along with an old-fashioned satchel, and he looked so hard up and rusty that I gave him the poorest room in the house, and asked for a deposit of \$5. He made it, and I gave him no further attention. At the end of a week he came up to settle his bill, and when I gave him the figures he pulled out a check book and filled up a check for the amount.

"Can't take it," I said, as I shoved it back.

"Why?"

"Got beat too often."

"But it's good."

"Maybe."

"Well, I have no currency, and must pay you by check; very few people refuse them."

"Look here, old fellow," I replied, my mad coming up; "if you think to beat this house, you will get left! Either come down with the bill, or you'll go to jail!"

"He tore up the check, filled in another for \$200,000 on a Chicago national bank, and handed it over with this remark:

"Please step over to the bank and ask them to assure themselves that this would be honored in Chicago."

"I went over to a national bank, and inside of an hour Chicago answered that a check signed by the old man for half a million dollars was as good as gold. I had made a mistake in sizing my man up."

"But who was he?"

"He is familiarly known as 'Old Hutch,' king of the wheat ring."

SCREENINGS.

Effective grain elevators: Crows and blackbirds.

Strange that we object to the corn on the toe and not to that on the ear!—*Hotel Gazette*.

It has been judiciously decided that corn is fuel. The juice of it has long been known as a great heater.

"In three days last week Baltimore exported 1,000,000 bushels of corn." A-matze-ing.—*Pittsburg Chronicle*.

A squeeze in the stock market may be a bear hug or it may be the result of getting entangled in bull-rushes.—*Binghamton Republican*.

The Kansas editors who are advising the farmers to crib their corn are the ones who copy items from exchanges and refuse to give the proper credit.—*Topeka Lance*.

Jollyman—"You ain't interested in the bucket shop question, are you?"

Broker—"No; why do you ask?"

Jollyman—"Well, I see you are a little pail this morning."—*Texas Siftings*.

"A load of corn given away with every pound of tea" is a sign we will probably see outside of our big tea stores ere long, if corn values decline much further. A barrel of flour will doubtless be added a few years hence.—*Produce Exchange Reporter*.

Cjerks—"You know old Samp'e, the biggest liar in the Northwest? Well, he's going into business." Bjerks—"What's he going into?" Cjerks—"He hasn't made up his mind whether to be a weather profit or a crop statistician."—*Minneapolis Journal*.

"Old Hutch" has not only forgiven the clerk who robbed him of \$5,000, but has reinstated him in his old position. Perhaps after awhile the "business" young man may be received into full partnership. "A fellow-feeling makes us wondrous kind."—*Pioneer Press*.

The Chicago Board of Trade will cease to distribute its quotations throughout the country after this month. Let us hope that this rule will become permanent. The gambling would then be confined to the Board room, and nobody would care particularly which dog got the worst of the fight.—*Italianapolis Journal*.

Now that Chicago and Duluth have sent telegrams and letters of advice and remonstrance to the North Dakota Legislature against the proposed lottery revenue scheme, it would seem the proper thing for our legislature to do is to reciprocate by sending a memorial to the above named cities requesting them to close their "bucket shops," which have swallowed up countless thousands of dollars of North Dakota money.—*North Dakota Capital*.



Issued on February 18, 1890.

BALING PRESS.—Geo. W. Arnold, Toronto, Ont. (No model.) No. 421,472. Serial No. 322,461. Filed Aug. 30, 1889.

BALING PRESS.—Andrew Wickey, Quincy, Ill. (No model.) No. 421,462. Serial No. 302,773. Filed March 11, 1889.

BELT-SHIFTER.—George H. Remington, Providence, R. I. (No model.) No. 421,515. Serial No. 309,234. Filed May 1, 1889.

TRAMPING ATTACHMENT FOR COTTON OR HAY PRESSES.—William W. Adams, Ozark, Ark. (No model.) No. 421,644. Serial No. 354,582. Filed March 25, 1889.

GRAIN-METER.—Jacob Struble, Sioux City, assignor, of one half to Benjamin Harrison, Lincoln Township, Iowa. (No model.) No. 421,875. Serial No. 318,857. Filed July 27, 1889.

GRAIN MEASURE AND TALLY.—Oscar D. McDaniel, Ridgway, Ill. (No model.) No. 421,431. Serial No. 313,554. Filed June 8, 1889.

AUTOMATIC REGULATOR FOR GRAIN SCALES.—Chas. H. Cooley, Hartford, Conn., assignor to the Pratt & Whitney Co., same place. (No model.) No. 421,556. Original application filed Feb. 3, 1888. Serial No. 262,850. Divided, and this application filed Oct. 15, 1888. Serial No. 288,159.

AUTOMATIC GRAIN WEIGHING MACHINE.—Wells T. Barker, Nashville, Mich. (No model.) No. 421,850. Serial No. 309,069. Filed April 29, 1889.

Issued on February 25, 1890.

CONVEYOR.—Daniel M. Maxon, Bay City, Mich., assignor of one-half to James McKeon, same place. (No model.) No. 422,139. Serial No. 312,736. Filed May 31, 1889.

ELEVATOR-BUILDING CONSTRUCTION. John S. Metcalf, Chicago, Ill., assignor to the Metcalf-Macdonald Company, same place. (No model.) No. 422,029. Serial No. 325,530. Filed Sept. 30, 1889.

GRAIN DUMP.—Andrew H. Wehrli and Frank J. Sanchez, Monee, Ill. (No model.) No. 422,102. Serial No. 327,211. Filed Oct. 16, 1889.

GRAIN-SHOVELING APPARATUS.—William H. Cummings, Chicago, Ill. (No model.) No. 422,123. Serial No. 333,008. Filed Dec. 9, 1889.

AUTOMATIC GRAIN SCALES.—Cyrenius Dorning, Englewood, Ill. (No model.) No. 421,912. Serial No. 328,578. Filed Oct. 29, 1889.

BALING PRESS.—Winfield S. Livengood, Kansas City, Mo., assignor of one half to Chas. L. Ballentine, same place. (No model.) No. 422,236. Serial No. 293,745. Filed Feb. 5, 1889.

BALING PRESS.—Andreas Mattijetz, Giddings, Tex. (No model.) No. 422,138. Serial No. 320,712. Filed Aug. 14, 1889.

BALING PRESS.—Henry V. Scattergood and Chas. F. Scattergood, Albany, N. Y., assignor to Walter S. Brown, same place. (No model.) No. 422,321. Serial No. 326,802. Filed Oct. 12, 1889.

BELT FASTENING.—Edwin B. Stimpson, Brooklyn, N. Y. (No model.) No. 422,062. Serial No. 323,678. Filed Sept. 11, 1889.

CORN SHELLER.—Charles Oath, Jr., Mount Vernon, Ind. (No model.) No. 422,035. Serial No. 308,850. Filed April 24, 1889.

Issued on March 4, 1890.

BALING PRESS.—Anderson H. Spencer, Oenaville, Tenn. (No model.) No. 422,847. Serial No. 325,290. Filed Sept. 27, 1889.

GRAIN CAR DOOR.—Charles H. Emery and James P. Emery, Chago, Ill., assignors of one-third to Dwight B. Carmichael, same place. (No model.) No. 422,898. Serial No. 316,771. Filed July 8, 1889.

SCREW CONVEYOR.—James A. Gowans, Stratford, Ont., assignor by direct and mesne assignments to William W. Allis, Milwaukee, Wis., and J. M. Duncan, Boston, Mass. (No model.) No. 422,766. Serial No. 220,030. Filed Nov. 27, 1886.

BUCKET-ATTACHING LINK FOR CHAIN CONVEYORS.—Thomas Craney, Bay City, Mich. (No model.) No. 422,735. Serial No. 312,401. Filed May 28, 1889.

FLAXSEED SEPARATING MACHINE.—Lucy J. B. Easton, Rochester, N. Y. (No model.) No. 422,748. Serial No. 304,807. Filed March 26, 1889.

ROTARY GRAIN METER.—Grant U. Pollard, Sedgwick, Kan. (No model.) No. 422,832. Serial No. 315,414. Filed June 24, 1889.

GRAIN SEPARATOR.—James F. Hatfield, Dublin, Ind. (No model.) No. 422,776. Serial No. 325,536. Filed Sept. 30, 1889.

SPLIT PULLEY.—Hiram Burnham, Burnhams, N. Y. (No model.) No. 422,568. Serial No. 326,000. Filed Oct. 4, 1889.

PULLEY.—Wallace H. Dodge, Mishawaka, Ind. (No model.) No. 422,507. Serial No. 313,153. Filed June 5, 1889.

AUTOMATIC GRAIN SCALES.—Henry Earle, Canon City, Colo. (No model.) No. 422,747. Serial No. 319,978. Filed Aug. 7, 1889.

SEPARATING MACHINE.—Noah W. Holt, Manchester, Mich. (No model.) No. 422,785. Serial No. 305,716. Filed April 2, 1889.

GRAIN WEIGHING AND REGISTERING APPARATUS.—Reuben N. Robinson, Sidney, Ohio. (No model.) No. 422,542. Serial No. 327,510. Filed Oct. 19, 1889.

Issued on March 11, 1890.

GRAIN CAR DOOR.—Charles H. Emery and James P. Emery, Hyde Park, assignors of one-third to Dwight B. Carmichael, Lake, Cook county, Ill. (No model.) No. 423,041. Serial No. 290,193. Filed Nov. 7, 1888.

GRAIN DOOR FOR CARS.—Edmund D. Bronner, Detroit, Mich., Robert Potts, St. Thomas, Ont., and William A. Pungs, Detroit, Mich., assignors by direct and mesne assignments to the Metallic Grain Door Company, Detroit, Mich. (No model.) No. 422,909. Serial No. 312,269. Filed May 27, 1889.

GRAIN SEPARATOR.—Benj. T. Boomer, Budcomb, Ill. (No model.) No. 423,304. Serial No. 249,263. Filed Sept. 9, 1887.

ROTARY SEPARATOR, GRADER OR BOLTER.—Rudolph W. O. Rehmenklau, Minneapolis, Minn. (No model.) No. 422,974. Serial No. 308,872. Filed April 27, 1889.



The Pueblo, Colo., Board of Trade is erecting a fine new building.

Tickets of membership to the New York Produce Exchange have been steady at \$900.

The Louisville Board of Trade has been fighting the anti-trust bills introduced in the Kentucky Legislature.

The new move of the Chicago Board of Trade against the bucket shops has produced a boom in memberships, and recently \$1,110 was bid.

The St. Louis Merchants' Exchange is said to be negotiating for the Chamber of Commerce building. If secured \$100,000 will be spent in improvements.

The employees of the quotation department of the Chicago Board of Trade have been officially notified that their services would no longer be required after March 31, 1890.

A movement is, it is reported, on foot on the New York Produce Exchange to officially abolish the Grain Call, with possibly the exception of the session held on the last day of each month.

A move is on foot to make No. 1 Northern wheat deliverable on contracts on the New York Produce Exchange. At present No. 2 red and No. 1 hard wheats are deliverable on contracts.

The bucket shops of New York City were raided recently and their proprietors taken to jail, but on the following day those that were able to procure bail were doing business at the old stand.

The directors of the Chicago Board of Trade at a recent meeting adopted the following resolution, which was read on the floor of the Exchange the following day: *Resolved*, That it is the sense of the directors that dealing in "privileges" on the floor of the Exchange is uncommercial and dishonorable conduct, and contrary to the good name and dignity of the association.

For some time West Superior (Wis.) people have been working for a Chamber of Commerce building. The intention is to have a home for the Chamber of Commerce and Board of Trade. The latter organization is not yet in existence, but it is understood that only a short time will elapse before it will be started. It will furnish a place where wheat and the other cereals can be bought and sold. It is stated that Minneapolis parties will become members of the Board. Operations will not begin until the fall.

In speaking of the resolution passed recently by the directors of the Chicago Board of Trade in regard to trading in "puts and calls" an ex-president said: "It looks to me as though we are approaching a crisis. Look at memberships down to \$800. There are the bucket shops. A year or two ago we had them almost wiped out. In pressing the battle the courts went against us. Now the bucket shops are powerful enough to send brokers in on the floor and control the market, whenever they have enough outside traders on their list to make it an object. Just now this question of puts and calls is threatening to

disrupt our business. From \$10,000 to \$50,000 change hands in an afternoon in the settling room down stairs where the trading in privileges is more exciting than the business in the pit. A few have had the nerve to deal in puts and calls on the floor. That resolution will prevent it about as much as the directors can stop it raining. The truth is we are demoralized. The bars have been let down and we are running wild. What is to be the end?"

The St. Louis Merchants' Exchange has passed resolutions to the effect that the telegraph companies having counters in the Exchange hall be requested to not render service of any nature by special wire or otherwise from the Exchange rooms to any bucket shop, pool room or turf exchange, and that the trustees of the bondholders of the Chamber of Commerce building be requested to discontinue the renting of rooms in the building to bucket shops, pool rooms and turf exchanges after the present leases expire.

At the annual meeting of the Winnipeg Grain Exchange, held recently, the following officers, members of the council and board of arbitrators, were elected by acclamation: President, N. Bawlf; vice-president, F. W. Thompson; secretary-treasurer, C. N. B. Il; council, S. A. McGaw, E. L. Drewry, S. Nairn, W. W. McMillan, A. Atkinson, S. Spink, S. P. Clark, Wm. Martin, John Wilson, James Anderson and Robert Burns; board of arbitrators, S. A. McGaw, J. A. Mitchell, S. Spink, R. P. Roblin, R. Stewart, W. W. Watson and S. Nairn. Reference was made to the satisfactory effect of selecting standards for grading at Winnipeg, instead of at Toronto, as formerly.

The Detroit Board of Trade held its annual election Tuesday, March 4, and elected the following officers: President, Charles V. Bryan; first vice-president, James H. Donovan; second vice-president, D. F. McDonald; directors, John H. Wendell, J. B. Roe, D. J. Campau, C. W. Baird, F. Marvin, Daniel Stewart, William Carson, John Hurley; committee of arbitration, N. G. Williams, Jr., Thomas G. Craig, J. C. McDonald, C. J. Heath, F. J. Simmons, W. J. Kinmont, R. H. Anderson, F. W. Lichtenberg, Alfred Green, Jacob Beck; committee of appeals, Walter Bourke, W. J. Howard, H. E. Emmons, James T. Shaw, E. J. Carrington, F. T. Caghey, A. J. Ellair, D. Stott, David F. Mitchell.

The directors of the Chicago Board of Trade approved an amendment to the rules whereby corporations doing business on the Board of Trade will be required to file with the secretary, on or before Jan. 5 of each year, the amount of their capital stock and paid in stock, the record to be open only to the inspection of members of the Board. The corporations referred to are the commission houses acting under charters from the state, and the reason given for the amendment is that capital stock is no indication of actual assets, the knowledge of which is necessary to the safety of creditors. The amendment was submitted to the Board and adopted by a vote of 322 to 57. The directors then passed a resolution requiring all incorporated companies using the clearing house to file by March 5 a statement showing the condition of the company on March 1.

THE CORN WHEN BEAUTIFUL.

When from the entomb'd grain the shoot
Its tender blades gently unfold,
The earth is stirr'd around the root
By plow betwixt the rows run bold.

When on its infant bed it grows,
Dress'd with the planter's skill and toil,
Who digs the grass with iron hoed,
And stores around the mellow soil.

When from youth ascending to bunch,
From which strong folds the tassels shoot,
Still tending upward, the bold growth
Proudly boasts large promise of fruit.

When on the stalks the tassels show,
How beautiful the growing corn,
The heavens above, the earth below,
Arranged in splendor they adorn.

When stalks in martial order stand,
As armies in the field display,
With not a straggler from the band,
They rush to battles fierce array.

When coy silks, the farmer's delight,
Appear as brides, nuptially dress'd,
A charming prospect to the sight,
Harbinger of espousal feast.

When on the ears the full silks bloom,
To retain pollen showers,
As spray'd from the blooming bridegroom,
The smother'd grain receives its powers.

When in soft beams at twilight's sway
Whispering zephyrs play on the blades
That tremble in the moon's pale ray
And winnow fragrance through the glades.

When the rich yellow harvest field,
The land with heavy crop to load,
Each stalk bearing its ample yield,
To fill home barns, and sell abroad.

When thus the blade, and then the corn,
And then the full corn in the ear,
So in the man, the new spirit born,
Will grow till harvest time appear.

—O. Hendrick

WATERWAYS

About twenty new canal boats for carrying grain are being built at Buffalo.

The canal forwarders at Buffalo will soon be in readiness for the opening of the season.

Canal navigation has not been closed this winter at Toledo, except for three or four days.

Engineers are surveying the route for a proposed ship canal between the Shenango Valley and Lake Erie.

A number of surveys of different routes for the proposed canal from Lake Erie to Pittsburg will probably be made soon.

Reports from Washington go to show that the Hennepin Canal project will not get much support this session of Congress.

River men between St. Louis and St. Paul have petitioned Congress for an appropriation for the improvement of the Galena River.

The German Government has decided to connect Berlin with the Baltic by means of a ship canal. The work will be commenced in a few months.

New York boatmen are making an effort to secure an appropriation of \$500,000 with which to lengthen locks and make other extraordinary repairs.

At no time during the past winter has navigation been entirely suspended on the great lakes, and what is usually called spring navigation is about to open.

The House Committee on Railways and Canals will undoubtedly report favorably the bill providing for the purchase of the Portage Lake Ship Canal by the government.

The lake is still open and there is no prospect now that it will be closed by ice this season. With millions of bushels of grain in her elevators, awaiting water transportation, Duluth is prepared for an early opening of navigation.—*Duluth News*.

Temporary buildings have been constructed along the Erie Canal and filled with poor ice, which will be shipped to New York City as soon as navigation opens. This will probably make grain rates on the canal higher than usual at the opening of the season.

A bill was introduced in the New York Legislature recently fixing the maximum rates for transporting wheat from Buffalo to New York by canal at $4\frac{1}{2}$ cents, and other products accordingly. The boatmen are strongly opposed to the bill, and will fight it.

The Washington & Cumberland Railroad Company, a new organization, has submitted a proposal to the Legislature at Annapolis, Md., for the perpetual lease of the Chesapeake & Ohio Canal. A message from the governor accompanied the proposal urging its acceptance.

The Canadian Government has definitely promised to grant the usual reduction of canal tolls on all grain but oats for export, and the order in council would have been already issued had it not been for the demand of the Board of Trade that oats should be placed on the same footing as other grain.

An order in council has been passed fixing the tolls on wheat, barley, Indian corn, peas and rye passing through the Welland Canal and the St. Lawrence Canal for Montreal and ports east of Montreal at 2 cents per ton during the coming season of navigation. On grain intended for Canadian ports west of Montreal the full tolls of 20 cents per ton will be levied.

The four engineers sent by the French Government to make a report upon the Panama Canal and submit estimates of completing the scheme, passed through Chicago recently on their way home. While very reticent, they tacitly admit that their report will be unfavorable. "It is nothing but a bad dream," said one of them, referring to the great failure.

Shipments of grain by the Erie Canal from Buffalo during the season of 1889 amounted to 41,742,000 bushels, against 38,070,930 in 1888. The total shipments by rail for the twelve months were 42,032,715 bushels, against 29,964,520 in 1888, and 30,958,927 in 1880. The rail shipments during the canal season of seven months reached 33,422,470 bushels, a figure significantly close to that reported for the canal.

The Chicago Vessel Owners' Association has elected the following board of directors for next season: W. M. Egan, J. L. Higgin, J. G. Keith, C. W. Elphicke, Wm. Walsh, J. S. Dunham and Thomas Hood. The directors then selected officers as follows: President, W. M. Egan; vice-president, J. S. Dunham; secretary, Frank B. Higgin; treasurer, C. W. Elphicke; executive committee, J. G. Keith, J. L. Higgin and William Walsh.

A delegation from Delaware and Maryland appeared before the River and Harbor Committee of the House to advocate the construction of an inland ship canal between Chincoteague Bay and Delaware Bay. This is an old project, but it is to be pressed with renewed vigor upon the attention of the House this year. The ship canal can be constructed, it is estimated, at a cost of only \$300,000.

Congress will be asked to appropriate \$100,000 this year to begin the work. This canal, when finished, will afford shelter for vessels in the harbor of Lewes, and will also be of great commercial value as a waterway.

A bill has been introduced in the Senate appropriating \$50,000 to make a survey for a ship canal between Lake Superior and Lake Michigan. The survey is to be made from Little Bay de Noc north to Lake Superior. The distance is about forty miles, and should the plan prove feasible after an investigation on by the government engineers a canal will be built which will shorten the distance from Duluth to Chicago about 400 miles.

A resolution has been offered in the State Assembly at Albany, N. Y., stating that the annual tax levy to maintain the Erie and Oswego canals has become a burden to the people. It is claimed that these canals are being kept up mostly for the benefit of the Western states, and that the merchandise shipped from local points is very small. It is proposed to have the United States take control of these two canals and keep them in repair as long as they shall remain in its possession.

Henry K. Wrickstead of Brantford, Ont., has proposed to the Canadian Government to expend \$70,000,000 in deepening the Ottawa and French rivers and constructing canals to enable ocean vessels to reach Lake Superior and Lake Michigan. He explains how vessels could be taken from Montreal to Chicago, Milwaukee, Duluth and Port Arthur, and says that they would handle nine tenths of the grain trade. He maintains that railroads could never compete with ships for the traffic.

The ship railway which will convey ships across the Chignecto Isthmus is almost completed. The isthmus is a narrow strip of land seventeen miles long, connecting the provinces of Nova Scotia and New Brunswick. The vessels to be transported are hoisted by hydraulic power to the basin of the track. Two locomotives will be used to draw the vessels, and will be built on the same principle as ordinary engines but with much greater weight and power. A ship will be taken from the Bay of Fundy and placed in the Gulf of St. Lawrence in two and a half hours. This railway will shorten the distance of each trip about 500 miles.

The New York Canal Union, including the boatmen, have petitioned the Legislature for an amendment to the Laughlin bill reducing the rates on grain, etc., carried in canal boats. The amendment includes all railroads in the state and it provides that all grain, goods and commodities shall be delivered free on board of boats or cars and alongside of ships or wharves at destination. East-bound maximum rates: Grain—Wheat, 60 pounds to the bushel, 5 cents; corn, 56 pounds to the bushel, $4\frac{1}{2}$ cents; rye, 56 pounds to the bushel, $4\frac{1}{2}$ cents; flaxseed, 56 pounds to the bushel, $4\frac{1}{2}$ cents; barley, 48 pounds to the bushel, 4 cents; malt, 36 pounds to the bushel, $3\frac{1}{2}$ cents; oats, 32 pounds to the bushel, $3\frac{1}{2}$ cents.

A bill has been introduced in Congress providing for the construction of what is to be known as the Niagara Ship Canal. Several routes have already been carefully prepared, passing down the Niagara River to the point of turning above the Falls and cutting across almost directly to the Lake Ontario shore. From thence there is an open lake course to Oswego, whence the waterway will pass on the line of the Oswego Canal to a junction with the Erie at Syracuse. The project includes, furthermore, the deepening of the St. Clair Flats Canal to corresponding depth of twenty feet, and the assured provision of an adequate natural waterway from one end of the great lakes to the other, with an open choice of passages to the Atlantic.

The Merchants' River Line Navigation Company has been organized to establish a river freight line from Pittsburg to Omaha. The line is to be put into operation within the year. It will consist of sixty light draught river steamers and 300 barges. Two steamers with their tows will leave each terminus daily, the trip being made in fifteen days with stops at all principal river points. The rates on freight will be 15 cents per 100 pounds weight on all shipments of over 1,000 pounds. This is a reduction of two-thirds on the present rate by rail. It is understood that the Inman Line is backing the enterprise with the purpose of securing an inlet from the seaboard by which it can compete for the export grain trade of the Northwest. This enterprise is capitalized for \$5,000,000, 50,000 shares of a par value of \$100 each.

The first report of the Nicaragua Maritime Canal Company has been sent to the United States Senate, in accordance with the provisions of the act of Congress incorporating the company. The report says that the company has completed the axial surveys and final plans of the proposed inter-oceanic canal and that they have been approved by the government of Nicaragua. Permanent headquarters have been established at Greytown, buildings erected, a railroad and other works constructed, and a large store of machinery and materials collected. Of the capital stock 10,145 shares have been subscribed at par and \$601,450 paid in. Since June 3 \$500,000 has been expended upon the work in Nicaragua. The work to be done during the ensuing year consists of the construction of a breakwater at or near Greytown, on the Caribbean Sea, the building of locks and dams, and excavation along the route of the canal.

The Exchange Elevator Company of Cleveland, Ohio, has been incorporated. The capital stock is \$160,000, and the incorporators are C. H. Bloomer, P. G. Cook, Henry L. Schaefer, John B. Green and George Sandrock.

ITEMS FROM ABROAD

The outlook for crops in France and Germany is generally fair. The prospects for the Indian crop do not improve much.

The Customs Committee of the French Chamber of Deputies has voted to impose a duty of three francs on foreign corn, and five francs on corn flour.

During the past year Odessa has sent eight steamers of prime red winter wheat to South America. It is supposed that this wheat is to be used for seeding.

The largely increased number of agricultural implements imported into the Argentine Republic indicates that the agricultural industries are progressing.

Europe has nothing to spare for England, although via German ports comes good wheat, which is substituted by imports of rye and inferior wheat.—*London Miller*.

Belgium wheat importers are turning their attention to La Plata wheats, because the American and Russian shippers ask prices for forward shipments which they consider too high.

The crop reports from South Russia are generally rather favorable, while from Roumania it is reported that the disappearance of the snow during the mild weather in January has had an unfavorable effect on the young plants.

The exchange value of the Indian rupee is now tending against the Indian shipper. It formerly gave the exporter of Indian products great advantage over exporters of other countries, but its exchange value is now about 6 per cent. greater than it was a year ago.

The weather in Austria-Hungary has been unfavorable for the crops, but the wheat markets have improved. The exports of wheat and flour in the four months ending Nov. 30 were only 343,500 quarters, against 1,560,000 quarters in the same period of last year.

A Russian writer asserts that through the careless sacking of grain, and the use of hooks upon the sacks while loading and unloading into and from cars and boats, an average of 2 per cent. of all grain transported is lost, entailing an annual loss of \$5,000,000, and he estimates the yearly cost of bags at half that amount.

The grain crops of Russia, including Poland, for the past two years have been, in 1888, 39,096,000 quarters of wheat, 85,512,000 quarters of rye, 69,000,000 quarters of oats, 19,200,000 quarters of barley; in 1889, 23,738,000 quarters of wheat, 66,757,000 quarters of rye, 61,000,000 quarters of oats, and 13,988,000 quarters of barley.

The Indian weevil, which is proving so destructive in England, has been shipped to that country with many other injurious insects, in the foreign matter mixed with the wheat shipped from India. The importers have suffered heavily in cargoes of heated wheat, they being filled with weevils. The loss on this wheat amounts to about \$750,000 annually.

According to the European journals there will be from 10,000,000 to 20,000,000 bushels of wheat for export from the crop now being harvested in the Argentine Republic. Their idea is probably to frighten the holders of wheat in the United States, and make them sell at the present low prices. The exportable surplus of the Republic will not reach their lowest figure.

It has been decided in the Argentine Republic that the method of storing and treating grain is inadequate to the requirements, and away behind the times. In consequence they have resolved to adopt the grain elevator system of the United States, in order to keep the wheat in good condition and ship more rapidly. Elevators will be built at the most advantageous points in the country.

According to the estimate in the *Corn Trade List* the probable surplus of wheat of exporting countries will fall short of the probable demand of importing countries by about 2,750,000 quarters, instead of only 750,000 quarters, as estimated last September. From present indications the probable exportable surplus will reach about 32,000,000 quarters, while the probable requirements will be 34,750,000 quarters.

The *Liverpool Corn Trade News* reports that "between good crops in Russia and bad crops there is a difference of about 80,000,000 and 120,000,000 bushels wheat alone, irrespective of rye, which this year promises about 120,000,000 bushels less food for home consumption in Russia. The crops of wheat have been: 272,000,000 bushels in 1884; 171,648,000 bushels in 1885; 155,600,000 bushels in 1886; 263,992,000 bushels in 1887; 246,240,000 bushels in 1888, and the crop of 1889 is estimated at 176,000,000."

The corn laws of Portugal are rather irksome to the people of that country just now. To encourage the farmers to raise more wheat a tax was placed on imported wheat. To further protect the wheat raisers, no importer is allowed to buy a bushel of foreign wheat unless he possesses two bushels of domestic wheat bought in a home market. At the present time all of the wheat of the country is in the hands of millers or speculators who will not sell, therefore none can be brought into the country.

Press Comment.

BUCKET-SHOP "TRADING."

There can be no gainsaying the allegation that bucket-shop "trading" is gambling without a single redeeming feature or the shadow of an excuse that it has a business foundation. The plea that some of the trading done on the Boards of Trade is of the gambling class does not help the case at all.—*Chicago Tribune*.

TO ADVANCE THE PRICE OF CORN.

Eastern buyers will not pay more for corn than is necessary to obtain it. The seller does his share in fixing the price when he lets his corn go at the low price offered. When corn cannot be obtained at present prices it will become necessary for buyers to advance the price in order to get it. Every one who can, should crib up his corn and hold it until reasonable figures are offered. In this way, or by feeding it to stock, the price of corn can be revived.—*Douglas, Kan., Tribune*.

STORE THE CORN.

The producer who will make the money out of the 1889 crop is the man who can find money to buy corn, and crib it up. No matter what reduction is made in freight rates, the price of corn will not advance until this year's crop is far enough advanced to determine whether there will be a full crop or a failure. There are millions of bushels of corn in the country, now that there is no market or demand for it, and a reduction of freight rates will not materially advance the price.—*Atchison Globe*.

THE MUTATIONS OF POPULAR WILL.

The mutations of the popular will are always puzzling to the historian. Among the recent events which bring this thought to mind is the Inter-State Commerce Law. It is only a short time ago that the popular will was sufficiently strong to secure its enactment and now petitions are being sent in to Congress from legislatures, boards of trade, commercial associations, corporations, individuals, and even from associations of the "horny-handed sons of toil," for its repeal or amendment in important particulars.—*United States Miller*.

A CONSTANT BEAR FACTOR.

Statistician Dodge's estimate of the quantity of wheat remaining in farmers' hands on the 1st day of March presents all the appearance of a "forced balance" made to preserve the consistency of his record and to fool the public into believing that his crop estimate of 490,000,000 bushels was not a gross exaggeration. The statistical bureau of the Agricultural Department has come to be recognized in the commercial world as a continuous and over-to-be relied on bear factor. It has developed in a worse curse to the producing classes of America than all the bucket shops and short sellers in Christendom.—*Chicago Daily Business*.

INDIFFERENCE TO SHIPPERS' NEEDS.

The growing importance of Baltimore as an export city causes much uneasiness in New York, and well it may. During 1889 the exports of agricultural products from Baltimore increased 100 per cent., while those of New York decreased. Having almost a monopoly of the import trade New York has for years exhibited indifference to the needs of shippers, exacted excessive sums for storage and lighterage and failed to provide ample warehouse and elevator facilities. What New York has neglected Baltimore has taken pains to supply. The marked increase in her shipping traffic affords striking proof that commercial supremacy can only be maintained by recognizing the demands of trade.—*Omaha Bee*.

CORNERS NOT THE CAUSE.

The opinion is often advanced that cornering wheat in Chicago ruined our market for grain in Liverpool, by forcing England to develop wheat growing in India. Wheat corners may have hastened the development of wheat production in India, but they are not the cause of it, nor is anything else ever done in this country the cause of it. This country might have prevented the cultivation of wheat in India by furnishing wheat to England cheaper than she could get it in India or anywhere else, but in no other way. The wages of common laborers in India is about six cents a day. It is to take advantage of this cheap labor that England builds railroads and opens up the wheat fields of India.—*Farm and Fireside*.

INTER-STATE LAW DOOMED.

It is coming! The Inter-State Commerce Law is doomed. Body after body of business men is petitioning for its repeal. Among recent converts to the truth that that law is a failure and an intolerable fraud is the Indianapolis Board of Trade, which recently adopted unanimously a resolution that "the law has failed to accomplish the ends intended." It would be a fine stroke of irony, when the people finally become aroused to the iniquity of that law and are demanding its repeal, to find the railroads fighting to keep the law on the statute books and to enforce it. The railroads are the only beneficiaries of the enactment. Of course, they have been harmed by it in some ways, but in other ways they have been really benefited by it. The public has received nothing but damage from it.

The repeal should not be long delayed.—*Milling World, Buffalo*.

THE GRAIN DOCTORS AT WORK AGAIN.

The stock of wheat at this port is now less than half what it was a year ago, and of contract grade the stock is but 2,196,000 bushels, as against 6,500,000 one year ago. This small stock is held by few people and commands a price equal to that of the May option. This has offered a temptation to manufacture an additional quantity by mixing, and in the past few days the quantity of No. 2 red has been increased by this process.—*New York Star*.

SHOULD FURNISH STORAGE.

No good reasons exist why the great transportation corporations should not furnish the same facilities for the storage of wheat and corn in bulk as they do for flour and other merchandise. Railroad magnates are considering the change demanded favorably, and its early enforcement may be reasonably expected. Receipts from railroad companies for given amounts of grain cannot fail to prove a great convenience. Free storage is sure to stimulate business, whether the cereals are delivered and temporarily stored in Chicago, Philadelphia, or Minneapolis. The asked for change must redound to the advantage of the grain trade in general. Whatever locality may derive particular benefit therefrom is in the line of the new course the grain trade is taking, that is all. A saving in storage rates of course adds most to the profits of the men having the heaviest amounts of grain to store.—*Millers' Review*.

HOW TO TELL GOOD OATS.

Good oats are clean, hard, dry, sweet, heavy, plump, full of flour, and rattle like shot. They have a clean and almost metallic luster. Each oat in a well-grown sample is nearly of the same size. There are but a few small or imperfect grains. The hard pressure of the nail on an oat should leave little or no mark. The kernel when pressed between the teeth should clip rather than tear. The skin should be thin. The size of the kernel will be less in proportion than the skin is thick. The color of the oat is not very material, but white oats are generally thinner in the skin than black. Again, black oats will grow on inferior soils. Short, plump oats are preferable to long grains. Bearded oats must have an excess of husk. Oats are not necessarily bad because they are thin skinned or bearded, but they must contain a less amount of flour per bushel than thin-skinned oats without beards.—*United States Miller*.

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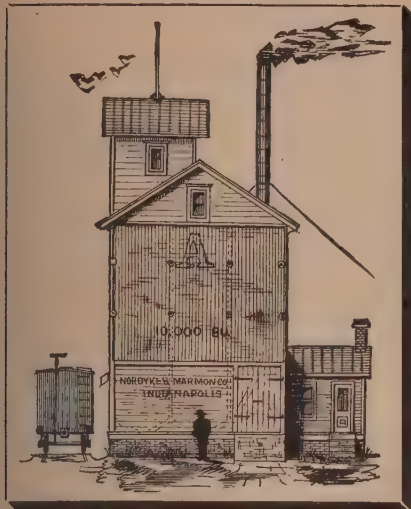
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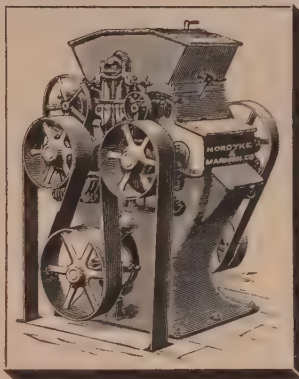
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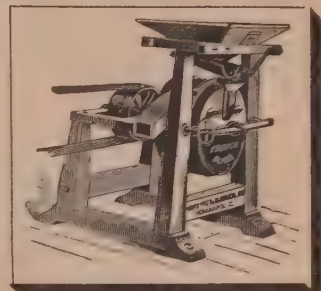


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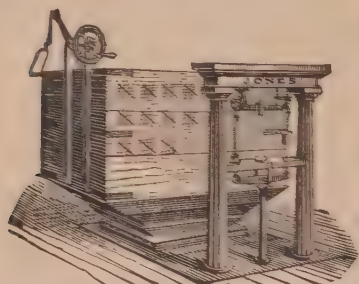
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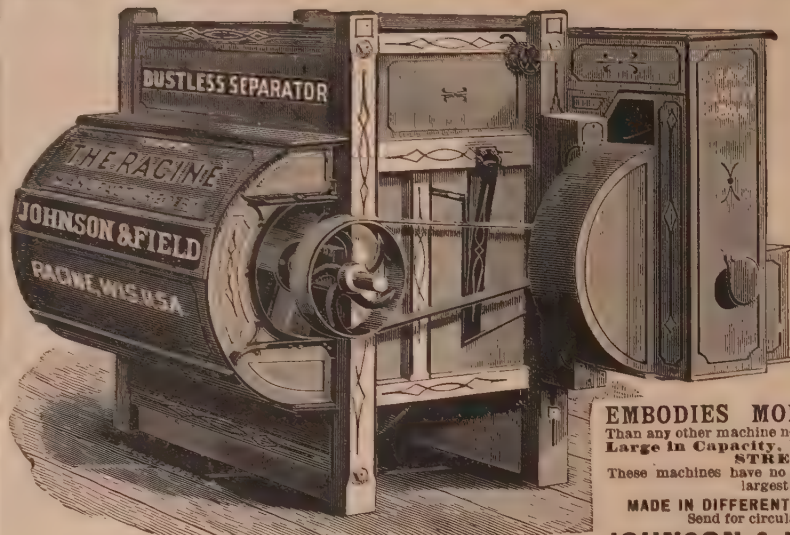
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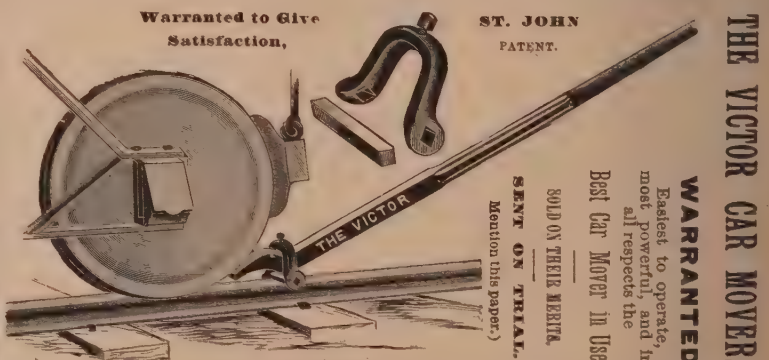
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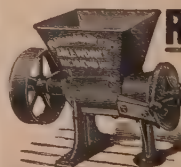
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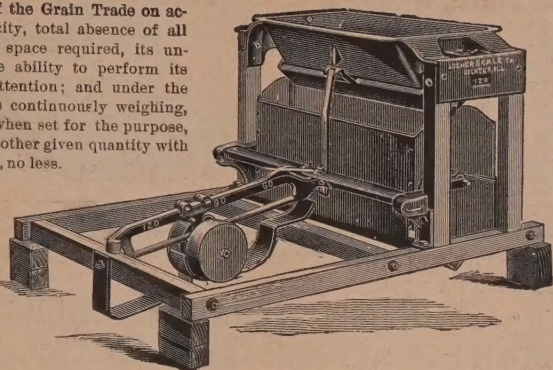
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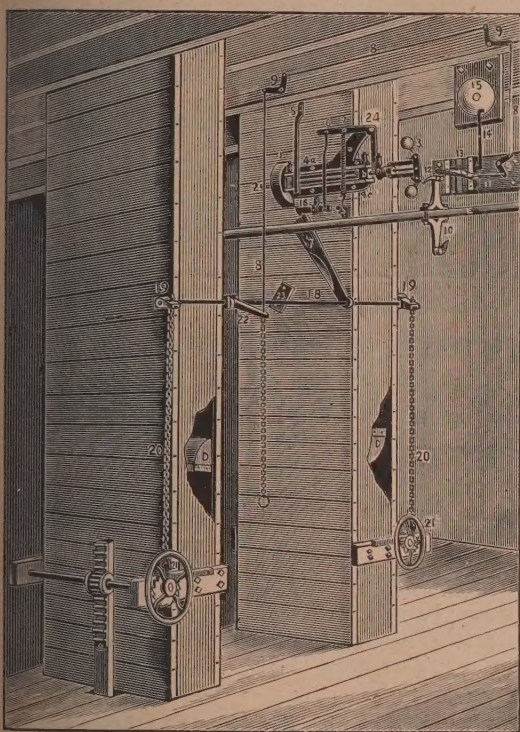
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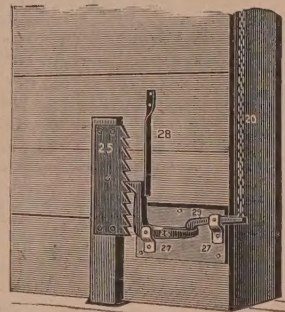
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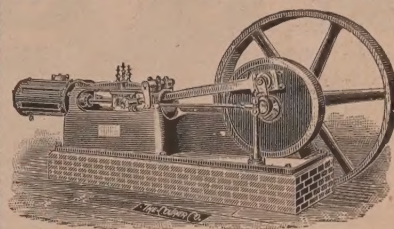
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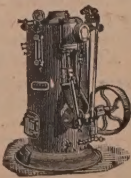
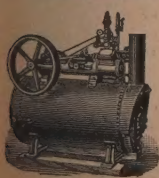
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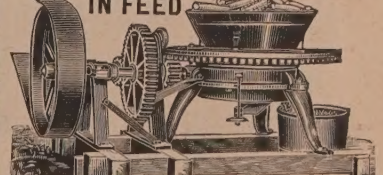
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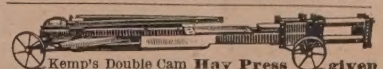
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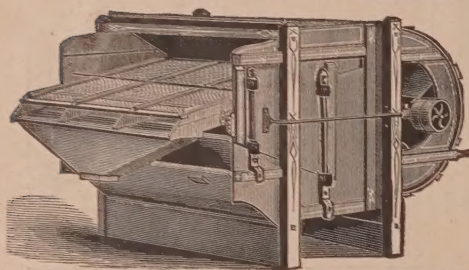


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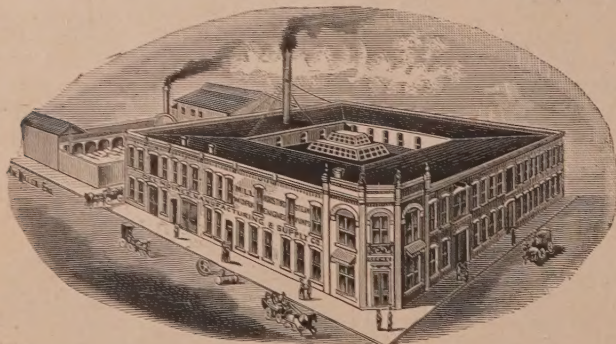
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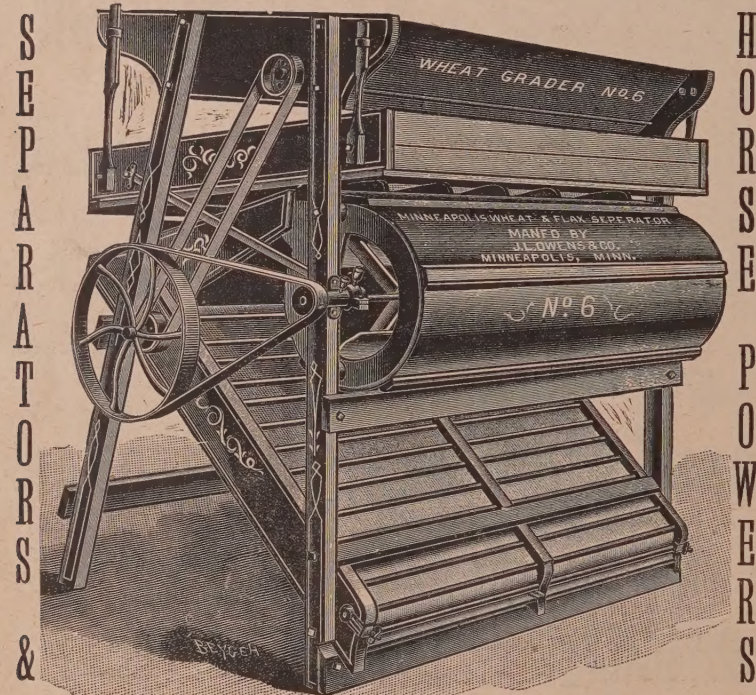
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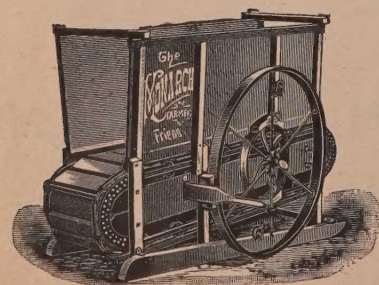


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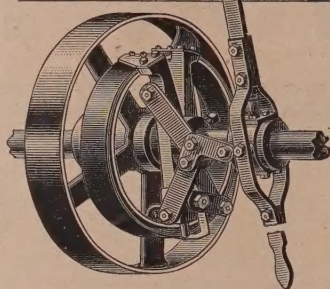
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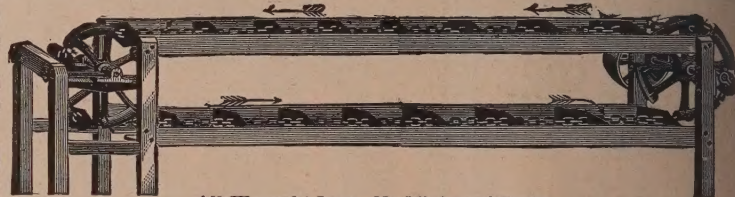
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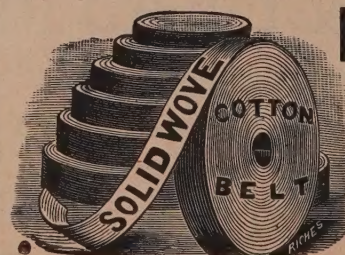
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